Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices
PLANT EXPLORATIONS
Ornamentals in Australia

U.S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY
NOV 2 6 1962
CURRENT SERIAL RECORDS

Agricultural Research Service
U.S. DEPARTMENT OF AGRICULTURE
in cooperation with
Longwood Gardens of the Longwood Foundation, Inc.
ACKNOWLEDGMENTS

This plant exploration trip owes its success almost entirely to the assistance and advice of many fine Australian people, who are interested in the preservation and use of their native flora. The author hopes that the names listed below include all those who helped in so many ways to make the exploration a successful undertaking. The omission of names is not intentional. The outstanding cooperation of everyone with whom the author came in contact throughout Australia is sincerely and gratefully acknowledged.

G. W. Althofer, Dripstone, New South Wales; R. H. Anderson, Chief Botanist & Director, Royal Botanic Gardens, Sydney, New South Wales; Trevor Arthur, Wimmera Forest Nursery, Wall, Victoria; Miss Alison Ashby, Blackwood, South Australia; Australian National Travel Association (for photographs); Eric Bailey, Plant Introduction Section, C.S.I.R.O., Perth, Western Australia; Dr. Stanley Blake, National Herbarium, Brisbane, Queensland; Jack Brophy, Plant Introduction Section, C.S.I.R.O., Perth, Western Australia; Miss Nancy Burbridge, Plant Introduction Section, C.S.I.R.O., Canberra, Australian Capital Territory; H. W. Caulfield, Director, Botanic Garden, Brisbane, Queensland; Ernest Constable, Seed Collector, Royal Botanic Gardens, Sydney, New South Wales; A. B. Court, Royal Botanic Gardens, Melbourne, Victoria; John Douglas, Australian Broadcasting Co., Sydney, New South Wales; S. L. Everist, Government Botanist, Brisbane, Queensland; Field Naturalists of Dubbo, New South Wales; Field Naturalists of Bendigo, Victoria; Ralph Field, Whiora, Tennyson, Victoria; C. A. Gardner, Government Botanist, Perth, Western Australia; Neil Gayfer, Plant Introduction Section, C.S.I.R.O., Perth, Western Australia; Forrest Hammersley, Australian Broadcasting Co., Geraldton, Western Australia; William Hartley, Principal Plant Introduction Officer, Division of Plant Introduction, C.S.I.R.O., Canberra, Australian Capital Territory; Ron Hill, Adelaide Botanic Garden, Adelaide, South Australia; R. W. Johnson, Seed Merchant, 176 Roberts St., Joondanna, Western Australia; H. G. Kershaw, St. Ives, New South Wales; A. E. Lindner, Vectis South, Victoria; Mrs. Elsie Lipple, Geraldton, Western Australia; T. R. N. Lothian, Director, Adelaide Botanic Garden, Adelaide, South Australia; K. Mair, Senior Botanist, Royal Botanic Gardens, Sydney, New South Wales; Dr. D. Martin, C.S.I.R.O., Regional Laboratory, Hobart, Tasmania; F. C. Payne, The Sanctuary, Athelstone, South Australia; R. T. M. Pescott, Director & Government Botanist, Royal Botanic Gardens, Melbourne, Victoria; W. N. B. Quick, Toorak, Victoria; B. E. Schubert, Noble Park, Victoria; Ray Smith, Royal Botanic Gardens, Melbourne, Victoria; Ray Steward, Adelaide Botanic Gardens, Adelaide, South Australia; and David Symon, Waite Agricultural Institute, Adelaide, South Australia.

Assistance in the compilation of this report by Frederick G. Meyer, taxonomic botanist, New Crops Research Branch, Crops Research Division, ARS, U.S.D.A., Plant Industry Station, Beltsville, Md., is gratefully acknowledged.

George H. Spalding
Los Angeles State and County Arboretum
Arcadia, California
# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Western Australia</td>
<td>4</td>
</tr>
<tr>
<td>Perth - Three Springs</td>
<td>6</td>
</tr>
<tr>
<td>Perth</td>
<td>7</td>
</tr>
<tr>
<td>Perth - Mingenew</td>
<td>7</td>
</tr>
<tr>
<td>Perth - Coorow - Wubin</td>
<td>11</td>
</tr>
<tr>
<td>Perth - Kojono - Albany</td>
<td>11</td>
</tr>
<tr>
<td>Perth - Geraldton - Mullewa</td>
<td>14</td>
</tr>
<tr>
<td>South Australia</td>
<td>16</td>
</tr>
<tr>
<td>Adelaide Botanic Gardens</td>
<td>17</td>
</tr>
<tr>
<td>Adelaide - Victory Harbor - Tailem Bend</td>
<td>17</td>
</tr>
<tr>
<td>Tailem Bend to Loxton</td>
<td>19</td>
</tr>
<tr>
<td>Loxton - Berri - Adelaide</td>
<td>22</td>
</tr>
<tr>
<td>Private gardens of Adelaide and Vicinity</td>
<td>22</td>
</tr>
<tr>
<td>The Ashby Garden, Adelaide</td>
<td>22</td>
</tr>
<tr>
<td>The Burdette Garden, Basket Range</td>
<td>22</td>
</tr>
<tr>
<td>The Sanctuary, Athelston</td>
<td>23</td>
</tr>
<tr>
<td>Waite Agricultural Institute, Adelaide</td>
<td>23</td>
</tr>
<tr>
<td>90-Mile Desert</td>
<td>23</td>
</tr>
<tr>
<td>Victoria</td>
<td>25</td>
</tr>
<tr>
<td>Royal Botanic Gardens, Melbourne</td>
<td>27</td>
</tr>
<tr>
<td>National Resources Conservation League, Springvale</td>
<td>27</td>
</tr>
<tr>
<td>Swanson Nursery, Frankston</td>
<td>27</td>
</tr>
<tr>
<td>Schubert Nursery, Noble Park</td>
<td>29</td>
</tr>
<tr>
<td>The Grampian Mountains - Little Desert - Bendigo</td>
<td>30</td>
</tr>
<tr>
<td>The Brisbane Ranges</td>
<td>32</td>
</tr>
<tr>
<td>Excursions for seeds</td>
<td>32</td>
</tr>
<tr>
<td>Lindner's Farm, Vectis South</td>
<td>33</td>
</tr>
<tr>
<td>Second Visit to the Grampian Mountains</td>
<td>33</td>
</tr>
<tr>
<td>Dunkeld Road - Hamilton to Penola (South Australia)</td>
<td>34</td>
</tr>
<tr>
<td>The Dandenong Ranges</td>
<td>34</td>
</tr>
<tr>
<td>Labertouche</td>
<td>34</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>35</td>
</tr>
<tr>
<td>New South Wales</td>
<td>37</td>
</tr>
<tr>
<td>Royal Botanic Gardens, Sydney</td>
<td>41</td>
</tr>
<tr>
<td>Trips from Sydney</td>
<td>42</td>
</tr>
<tr>
<td>Goonoo Forest near Dubbo</td>
<td>44</td>
</tr>
<tr>
<td>Khyber Pass, near Rylestone</td>
<td>44</td>
</tr>
<tr>
<td>Mt. Kosciusko</td>
<td>44</td>
</tr>
<tr>
<td>Queensland</td>
<td>47</td>
</tr>
<tr>
<td>Enumeration of the Introductions</td>
<td>50</td>
</tr>
<tr>
<td>Generic Index to Introductions</td>
<td>77</td>
</tr>
</tbody>
</table>
PLANT EXPLORATIONS FOR ORNAMENTALS IN AUSTRALIA

INTRODUCTION

A plant exploration to investigate wild and cultivated ornamental plants was conducted in Australia by the U.S. Department of Agriculture, from August 27, 1958, to February 14, 1959. This was the fourth in a series of explorations for ornamental plants undertaken by the Agricultural Research Service, United States Department of Agriculture, in cooperation with the Longwood Gardens of Longwood Foundation, Inc., Kennett Square, Pennsylvania.

Australia, with a highly endemic flora, was selected as the locale of the expedition, because the flora of this continent "down under" has long been appreciated as one of the richest in the world. Western Australia especially is a site renowned for its vast tracks of wildflowers, Australia comes late upon the scene of countries whose flora is relatively little known outside the Commonwealth. As compared with many other countries of the world, such as South Africa, China, Japan, Mexico, and Brazil, the plants grown in the United States of Australian origin are relatively few, except for species of Acacia and Eucalyptus, Melaleuca, and a few others. In a country with so many plants of great beauty, the reasons for this are not easy to understand, After 5 months and several thousand miles of travel over parts of Western Australia, South Australia, Victoria, New South Wales, and Queensland (fig. 1), I left Australia with boundless respect for the great wealth of plants of ornamental merit in this floral wonderland "down under."

The principal objectives of the trip sought to introduce plants with ornamental potential for testing in the United States, namely:

- Native wild species (as seeds).
- Improved types found in gardens as cultivars and hybrids of Australian species (seeds and cuttings).

Areas in the United States best suited to the cultivation of Australian plants out-of-doors cover a relatively small area, mainly in California and in the milder parts of southwestern United States. Probably some Australian plants are adaptable to southern and southeastern United States, where climatic conditions more favorably compare with the wetter parts of southeastern Australia, New plants for greenhouse and indoor use throughout the United States are a definite possibility among the large array of highly ornamental plants available among the Australian flora. Nearly 400 introductions successfully brought into this country as a result of the trip, represent a wide selection of Australian trees, shrubs, vines, herbs, and bulbous material.

The Australian flora can be compared with no other in the world, although certain floristic relationships exist with the flora of South Africa. The large family Proteaceae is confined largely to South Africa and to Australia, and the genus Acacia is well-developed in both areas. Other relationships exist between the floras of these areas in groups such as the Restionaceae, a sedgelike family of plants common in South Africa and in Australia. Mostly, the flora is unique unto itself with whole plant families confined almost wholly to Australia and with countless genera and most of the species not occurring elsewhere.
Figure 1.--Map of Australia. Collecting was concentrated within the areas bounded by heavy black lines.

Indeed, it is an area rich for the plant explorer—this land of bottlebrushes, mallees, gum-trees, wattles, and kangaroo-paws.

Australia is roughly the size of continental United States with a population (1958) of approximately 10 million—more than half of which is urban and concentrated in the capital cities. The rural element is widely scattered over the continent. Australia is one of the oldest land areas on earth, having been isolated from the adjacent Asian land mass since late Paleozoic or early Mesozoic times. Accordingly for a very long period the flora and fauna have been free to develop out of contact with other areas. Western Australia is world-famed for its display of wildflowers. The large number of flowering trees and shrubs is a particularly noteworthy aspect of the landscape. A few Australian plants are well-known in gardens and to forestry in other parts of the world. In California Eucalyptus globulus and E. viminalis Labill. are among the noblest of introduced trees. Acacia decurrens Willd. (black wattle) and A. dealbata Link, (silver wattle) both have naturalized in many parts of coastal California, and A. baileyana is widely grown as a choice flower of the florist-trade.

Australia is a relatively arid land except for rather localized mountainous areas of the southeast and the wet tropical coastal areas of Queensland and the northern territory. Large areas are frost free or nearly so. Snow is a yearly feature only in parts of the Australian Alps.

Traveling great distances through vast areas of the country over roads that are not always the best present problems, particularly in areas where collecting might be most
rewarding. Obviously, it was impossible to visit all of the Australian States on the 5-month trip. Only those areas where we could fulfill our objectives most profitably were visited. Principal areas selected for exploration included parts of Western Australia, South Australia, Victoria, Australian Capital Territory, and New South Wales. A cursory survey on two short trips was made to southeastern Queensland and to Brisbane.

Preliminary discussions in Canberra with members of the Plant Introduction Section of Commonwealth Scientific and Industrial Research Organization (C.S.I.R.O.) indicated the advisability of dividing the work into two phases: The first, a 6 weeks preliminary survey covering parts of Western Australia, South Australia, Victoria, New South Wales, and southeastern Queensland during the flowering season to locate areas judged likely to be the most profitable to visit later in the season for seeds; the second, a return trip to the above-selected locations for seed. The capital city of each State, where cooperating governmental agencies have their branch offices, was our headquarters for that State. Also, the botanical gardens, a major source of assistance, are located here. Special thanks are due to Mr. William Hartley, Principal Plant Introduction Officer, C.S.I.R.O., and the members of his staff for their invaluable assistance in this over-all planning.

Dr. W. H. Hodge of the Longwood Gardens, Kennett Square, Pa., participated in the first 6-week tour of the country. His help and advice were of inestimable value. During this period, Dr. Hodge visited Tasmania where he made arrangements for introductions from that island State. He also supplied most of the photographs for this report. The areas covered are presented as a unit, State by State, rather than as a day to day diary of events.
Wandoo woodland (*Eucalyptus redunca* var. *elata* Benth.) east of Mogumber, Western Australia.

(Courtesy of W. H. Hodge.)
WESTERN AUSTRALIA

(Sept. 5-13, Nov. 4-30)

Western Australia is the largest of the Australian States, roughly 1,500 miles long north to south and 1,000 miles wide east to west (fig. 2). The northern one-third is a tropical summer rainfall area, gradually changing to a warm-temperate and temperate winter rainfall area in the southern part. The State can be divided, very broadly, into two

Figure 2.--Collecting areas in Western Australia.
physical regions—an inland tableland (Great Plateau) and a low-lying coastal strip (Coastal Plain). Collections from Western Australia were made mostly in the Coastal Plain. We visited only scattered parts of the Great Plateau.

Soil types include (1) sand near the coast, (2) clay abutting the escarpment, (3) laterite—varying from loose pebbles to solid stonelike material called ironstone gravel or ironstone, in its more solid form, and (4) granitic soils. Local variations of the major soil groups are not uncommon.

According to Mr. C. A. Gardner, government botanist, some 6,800 species are represented in the flora of Western Australia, a large proportion of which are endemic. Few areas of the world are favored with a flora so rich.

Perth—Three Springs

The initial collecting trip of the Australian expedition began the evening of September 4 in company with Mr. Neil Gayfer, of the Perth office of the Plant Introduction Section, C.S.I.R.O. Traveling north to Carnamah (near Three Springs, some 200 miles north of Perth), in total darkness we noted in several places along the roadside white pear-shaped objects hanging thickly on the vegetation. We learned these were fruit of the wood-pear (Xylomelum angustifolium Kipp.,) of the Proteaceae. This narrow, upright, somewhat sparsely branched shrub bears highly ornamental fruit that suggests suitability as material for flower arrangements.

Coorow, about 15 miles from Three Springs and vicinity (September 9)—At Coorow we left the main highway and turned west on the Greenhead Road. At this point, we found wildflowers in great profusion with 10 or more species counted in an area of about 100 square feet. Plants of special interest included a tiny sundew, Drosera (Droseraceae) with apricot flowers; terrestrial orchids Thelymitra antennifera, Caladenia gemmata Lindl., (blue China orchid), and Diuris longifolia R. Br. (donkey orchid); species of everlasting (Schoenia sp., and Helichrysum sp.); and the omnipresent Cryptostemma calendulaceum (Cape weed), an introduced yellow-flowered composite from South Africa. The latter plant is considered to be useful for forage in this low rainfall area. West about 10 miles, still on the Greenhead Road, we noted Banksia prionotes Lindl., (Proteaceae), a shrub about 8 feet high with large heads of golden-orange flowers; a very spiny dwarf Acacia (probably A. spinescens Benth.,) laden with yellow flowers; a white-flowered Hakea (Proteaceae); pink and yellow species of Verticordia; and the small catspaw (Anigozanthos humilis), Amaryllidaceae.

Our first trip out the Greenhead Road ended abruptly after about 10 miles where flooding made the road impassable. The return trip in November presented similar problems, but at that time we traveled 20 miles when water again halted the journey. At this time, Verticordia oculata Meissn. (Myrtaceae) was at the peak of flowering. This is an attractive vase-shaped shrub about 3 feet high with an abundance of deep wine-red flowers, Calytrix aurea Lindl. (Myrtaceae) with yellow flowers, at the peak of bloom in November, provided a particularly outstanding display.

On the return to Perth via Moora, Mogumber, Gingin, and Yanchep, we traversed large areas cleared of native vegetation to permit grazing of sheep. In several places we were pleased to discover that an uncleared strip, varying from 50 to 100 feet in width, is preserved on both sides of the road where native plants abound. The soils examined were mostly sandy. In some sites lateritic soils were noted.
Five miles north of Moora, we sighted a small stand of the blue hibiscus (H. huegelii Endl.) This shrub stands about 6 feet in height with flowers varying from nearly pure white to clear lavender, up to 8 inches across. Nearby, in a soggy area, a species of sun-dew (Drosera), with very large leaves was in fruit. A good quantity of seed was collected.

At Moora we left the Great Northern Highway, taking the road through Mogumber, Gingin, and Yanchep to Perth. Between Moora and Mogumber sizeable stands of kangaroo-paw (Anigozanthos), represented by A. bicolor, A. humilis, and a yellow form of A. humilis were observed growing in nearly pure white sand by the roadside and along railroad embankments. Seedlings of Byblis gigantea (Byblidaceae), a rare Australian insectivorous plant, occurred in abundance in this locality. In November, the showy purple flowers the size of a quarter are produced in great abundance. A delightful pink-flowered Isopogon (probably I. divergens R. Br.) of the Proteaceae, also grows here. It is a thick, round, evergreen shrub, 3 to 4 feet high.

The terrain from Mogumber to Gingin is very rolling, mostly cleared land. The only vegetation remaining is Eucalyptus. Just west of Gingin we found Pimelea spectabilis Lindl. (Thymelaeaceae), a beautiful shrub about 2 feet high with heads of white flowers 3 inches across. About a mile farther on, we saw several acres of Conospermum incurvum Lindl. (Proteaceae), known as smoke bush in allusion to the smokelike appearance of this plant as seen at dusk. From this point, we returned to Perth in a steady downpour of rain.

Perth

King's Park, an area of about 1,000 acres in extent and located near the center of the city, is one of the famous natural preserves of Perth. Here many native plants of the region still abound. The environs of Perth are developing rapidly with much natural vegetation disappearing in the process. One of the finest stands of red and green kangaroo-paw (Anigosanthos manglesii) were observed near a gravel pit on the eastern edge of the city. In this locality, a dwarf cushionlike species of Stylidium (Stylidiaceae) with pink flowers, covered the ground. On the perimeter of the pit, Kennedya coccinea Vent. (Leguminosae), one of the so-called scarlet-pea vines, was plentiful.

Perth--Mingenew

(Via Bullsbrook and Bindoon)

Mingenew is a town located 250 miles north of Perth and 50 miles northwest of Three Springs. At Bullsbrook, located about 15 miles north of Perth, we found the green kangaroo-paw (Anigozanthos viridis Endl.). The emerald-green flowers of this striking plant rise above the swordlike foliage.

At Bindoon, a large group of blackboys (Xanthorrhoea preissii Engl.) made an impressive sight on the slope of a hill. This arborescent member of the Liliaceae stands 6 to 8 feet high with simple or unbranched trunks, often blackened by frequent fires which sweep the region. The common name "blackboys" for this species was coined by the early settlers
Yellow form of cat's paw (*Anigozanthos humilis*), Amaryllidaceae, Mogumber, Western Australia. (Courtesy of W. H. Hodge.)

Byblis gigantea (left foreground), Byblidaceae, one of the Australia endemic insectivorous species growing with *Anigozanthos humilis*, the yellow cat's paw, Mogumber, Western Australia. (Courtesy of W. H. Hodge.)
Blackboys, *Xanthorrhoea preisii* (Liliaceae) growing among eucalyptus near Bindoon, Western Australia. (Courtesy of W. H. Hodge.)

in allusion to the appearance of this bizarre plant in late afternoon as the sun casts spear-like shadows through the grassy foliage in contrast with the thick black trunks. These plants also are called grass-trees out of the similarity of the tough grasslike foliage that forms a moplike head of very inflammable dried leaves at the crown of the plant divided between those that form a skirtlike drapery around the trunk and the new green leaves that rise in a congested tuft above the old foliage.

Along this road, many acres of *Isopogon polycephalus* R, Br. (Proteaceae) provided a beautiful floral display. This shrub, about 5 to 6 feet in height, has finely cut foliage with heads of yellow flowers about 2 inches across. It resembles a large thistle. *Boronia ramosa* Benth. (Rutaceae) was seen at the 70-mile post north of Perth. This heathlike shrub, about 1 foot high and of rather open habit, produces blue flowers in small clusters. We considered this plant to be one of the floral gems found on the trip to Mingenew.
Hibbertia lasiopus Benth. (Dilleniaceae) is a plant of great beauty. This low subshrub with leathery evergreen leaves is less than 6 inches in height with a maximum spread of 2 feet. The golden-yellow single flowers are 1 to 2 inches across. It should make an excellent edging and ground cover plant, if one learns the secret of germinating the seed. Leschenaultia biloba (Goodeniaceae), with pure blue flowers, and Grevillea synapheae R. Br. were found together in an open field. These plants favor lateritic soils of the region.

Our host, Mr. C. A. Gardner, accompanied us to Erregulla Springs Station at Mingenew near Three Springs to help us identify plants found enroute. Mr. Gardner is interested in poisonous plants largely of the Leguminosae affecting livestock. His color photographs are now widely distributed throughout Western Australia as an aid to farmers who wish to identify these plants.

Erregulla Springs Station is an outstanding example of what improved methods of agriculture have accomplished in many areas of Western Australia. At this station, large experimental tracts are planted to lupine for fodder and soil improvement. In the center of the station stands as a natural preserve—a small hillock of 10 to 20 acres which, at the time of our visit, was covered with flowering composites representing species in a three-banded array of white (Helichrysum sp.), of pink (Schoenia cassiniana Steetz), and of a yellow unidentified plant.
West of Erregulla Springs Station, the land is very flat and hundreds of acres are planted to lupine. Beginning at the western edge of the cultivated areas, the soil is pure white, very loose, sand. Scattered specimens of *Verticordia grandis* Drumm, one of Australia’s most beautiful flowering shrubs, grow here. The plant is rather scraggily and of open habit, 2 to 3 feet high, with grayish perfoliate leaves and feathery, bright red flowers about three-quarters of an inch across. Flowers when cut keep for a long time and for the florist trade it probably would be of much interest. Another species, *V. grandiflora* Endl., with attractive yellow flowers was found nearby. This is a much-branched low plant about 1 to 1½ feet high with numerous feathery flowers.

Still farther west of Erregulla Springs Station, very sharp rock outcroppings of volcanic origin begin to appear. The beautiful Chapman River creeper (*Marianthus ringens*) Pittosporaceae occurs in this area. According to Mr. Gardner, this plant is nowhere abundant, not even in its home district on the Chapman River near Geraldton. It is extremely rare in the Three Springs area. This attractive twining vine with tubular orange-red flowers about an inch long was found growing over brush on a very steep hillock.

Perth--Coorow--Wubin

Our next journey into the hinterland took us north from Perth to Coorow, Waddi Forest, Maya, Buntine, Wubin, Milng and back to Perth via the Great Northern Highway. From Coorow to Buntine the vegetation is mostly scrub and the soil sandy. Along this route *Dodonaea microzyga* (Salicaceae) was observed with immature fruit. This is a shrub 3 to 5 feet high with inconspicuous flowers but with very ornamental winged bright red fruit. The smallish, pinnately compound leaves are evergreen and lustrous.

At the road junction in Maya, a very showy *Dampiera* (Goodeniaceae), with purplish-blue flowers, covered large areas. The tract from Maya to Wubin is notable for the great profusion of wildflowers. A pink-flowered *Grevillea* was found in quantity along the roadside.

A few miles south of Wubin, we noted in flower several low-growing species of *Acacia; Isopogon dubius* Druce and *Grevillea paradoxa* F. Muell. both of the Proteaceae; a Melaleuca and a *Beaufortia*, both of the Myrtaceae. Beyond this point south to Perth, the trip took us through wheat growing country where the only plant of note was a species of *Sowerbaea* (probably *S. laxiflora* Lindl.) of the Liliaceae. This 12 to 15 inches high perennial herb, with heads of clear lavender-purple flowers closely resembles *Tulbaghia violacea* Harv., the society garlic of South Africa.

On a later trip to this same general area in November, on a crossroad between Marchagee and Buntine, we found a fine display of *Verticordia grandis*, which were, according to C. A. Gardner, the finest he had seen. Specimen plants over 6 feet tall were covered with the bright red flowers. Other species of *Verticordia* are abundant in this region with flowers ranging from white through pink to red, orange, and yellow. A large area where these plants are growing together presents an almost aerial array of color not soon to be forgotten. Species of *Pileanthus* (Myrtaceae), some with merit as ornamentals, occur in this same area.

Perth--Kojonup--Albany

A trip to southwestern Western Australia took us to Albany on the south coast via Kojonup and Mt. Barker. The countryside between Perth and Kojonup is mostly flat with rather open Eucalyptus forest noted in a few places. Much of the area has been cleared for grazing. On the whole, the soil is sandy or rocky and of poor fertility. It was good to see
Grevillea wilsonii A. Cunn. (Proteaceae), a plant grown in California. In the native habitat, it is a sprawling shrub about 3 feet high with grayish foliage and bright red flowers. Around Kojonup, three species of Stylidium (Stylidiaceae) are common.

The Albany region is the home of Banksia coccinea R. Br. (Proteaceae), an open shrub about 2 feet high with bright red flowers in heads 2 to 3 inches across. It makes an excellent cut flower. Two species of Pimelea (Thymelaeaceae) grow in the coastal sand dunes. Of much ornamental merit, both are low-growing woody shrubs--with heads about 2 inches across, one of white flowers and the other, pink flowers. Another plant of the area is Scaevola, perhaps S. crassifolia Labill. (Goodeniaceae), a shrub about 6 feet high with masses of light lavender-blue flowers. The succulent stems are light green with flat succulent leaves.

The return north to Perth took us via Denmark and Walpole along the coast west of Albany, thence inland northwest to Manjimup, Bridgetown, and Donnybrook, thence north along the coastal route through Pinjarra to Perth.

Between Albany and Denmark, Callistemon specious (Myrtaceae) is abundant in marshy areas. This red-flowered bottlebrush grows to about 3 feet high with inflorescences 6 inches or more long and about 2 inches in diameter. Anigozanthos flavida, the tallest species of the genus, grows in this area. The dark red to yellow-green flowers are produced on plants up to 6 feet high with straplike foliage.

The Albany region is the classical locality for Cephalotus follicularis (Cephalotaceae), the Albany pitcher-plant. This insectivorous species is placed by most authorities in a
separate family by itself, although it shows kinship to the saxifrage family (Saxifragaceae). A curious aspect of this plant are the leaves, some of which are modified to form small urn-shaped pitchers in a rather dense rosette at ground level a few inches across and high. The pitchers, about 1 to 1-½ inches high and almost as wide are interestingly marked, especially the lip with reddish-brown ribs and the lid with reddish-brown stripes. The small unattractive white flowers borne on a long scape resemble closely those of the genus Saxifraga. Plants in their native habit grow in peaty soil in boggy places above standing water. Living plants of Cephalotus have been successfully introduced to the United States as one of the objectives of the Australian trip, not only for scientific purposes, but as a potential ornamental plant to be grown in terrariums in the way we grow the venus fly trap (Dionaea muscipula Ellis) and the sundew (Drosera).
A species of Dampiera (Goodeniaceae) was abundant along the roadside. This wholly Australian genus consists of herbs and shrubs, often with showy blue or white, or rarely yellow flowers. About 15 miles east of Walpole, in the Valley of the Giants, so-called for the magnificent Eucalyptus forest found there, we saw E. diversicolor F. Muell, which rivals the redwoods of California in height. A large-flowered Chorizema, possibly C. cordata (Leguminosae), occurs as an understory plant in the forest. An attractive Leucopogon (Epacridaceae) also occurs here.

Near Donnybrook, a yellow-flowered Patersonia, probably P. xanthina F. Muell. (Iridaceae) was seen in fields. It is one of the few species without lavender flowers.

Perth--Geraldton--Mullewa

The Geraldton-Mullewa section was selected for the final collecting trip in Western Australia. Geraldton is on the Indian Ocean approximately 250 miles north of Perth. Mullewa is 60 miles east of Geraldton. Also included was a 2-day trip to the Station Country near Mt. Magnet, located 260 miles from the coast and about 200 miles east of Mullewa. In this area we found the greatest concentration of species observed of all areas visited during the Australian expedition.

Grevillea leucopetra Meissn. (Proteaceae), a native of the area, grows along a 2-mile stretch of the road about 30 miles east of Geraldton. This beautiful large shrub grows to 8 feet or more in height, with needlelike dark green foliage. In full bloom at the time of our visit, the spikes of creamy-white flowers, 6 to 8 inches long, are borne in profusion over the bushy plants. The rather unpleasant odor emitted by this species is the only disagreeable aspect noted of an otherwise beautiful protead. Grevillea endlicheriana occurs in the same area as an open-growing bush, 3 to 4 feet high, with attractive pink to mauve flowers. The seed pods are very sticky. As in other areas visited, Verticordia is one of the conspicuous plants of the Geraldton area, especially in the region out the Mullewa Road. Areas where these plants grow resemble a vast floral carpet of white, mauve, pink, and burnt-orange flowers. Another plant Leschenaultia linarioides DC. (Goodeniaceae) produces red and yellow flowers on nearly leafless stems. On a dry railroad embankment, the rock-boronia, Boronia cymosa (Rutaceae), with light and deep pink or occasionally white flowers, was found in some abundance.

From Mullewa eastward to Mt. Magnet is roughly 200 miles of dry, forbidding countryside, largely devoted to the raising of sheep. The woody vegetation consists chiefly of Acacia (Mulga) and Eremophila (Myoporaceae), with an herbaceous cover largely of annuals. Two species of Eremophila were observed with possibilities as ornamentals, one with pink and the other with white flowers. Unfortunately, the flowering season was over and the seed crop was immature.

South of Geraldton, along the coastal road, a beautiful densely leaved shrubby Cienfugosia (Malvaceae) 5 to 6 feet high grows in the sand dunes, with white to cream-colored flowers with a dark purple blotch on the inside at the base of the petals. The leaves are bright green and needlelike. A species of Clematis was abundant in this locality. A protead of note found here is Banksia sphaerocarpa, a plant we saw in abundance farther along the coastal road south of Geraldton. It is a low shrub with round heads of pale yellow flowers produced at the base of the plant. The Christmas tree of Western Australia, Nuytsia floribunda R. Br. (Loranthaceae), a parasitic species with brilliant orange flowers one-half to three-quarters of an inch long, was in full bloom.
The Chapman River empties into the Indian Ocean near Geraldton. We found Marianthus ringens (Pittosporaceae), which were not in bloom, growing on the river banks. Another species, M. lineatus, with yellow-striped purple flowers, was collected on the Mullewa Road. These are attractive twining shrubby vines.

We spent the last days in Western Australia on a return trip to Carnamah, located about 200 miles north of Perth and 15 miles north of Coorow, mainly for the insectivorous plant, Byblis gigantea, now at the peak of flowering. The showy purple blossoms, about an inch across, are produced in great abundance at this season. We had hoped to obtain seeds of the acacias seen on the earlier trip in September; but they were mostly nonexistent because of the "wogs" insects that do much damage to wild seeds in Australia.
Sugar gum, Eucalyptus cladocalyx F. Muell., Waite Agricultural Institute, Adelaide, South Australia.
(Courtesy of W. H. Hodge.)
SOUTH AUSTRALIA
(Sept. 14-23, Dec. 2-6)

South Australia (fig. 3) comprises about 380,000 square miles in the south-central part of Australia. The capital, Adelaide, as in other Australian states, is the hub of all activities in the State. This was our headquarters on two visits made to this city.

The State lacks naturally wooded areas, but extensive man-made forests of *Pinus radiata* D. Don an introduced pine of California, now covers nearly 130,000 acres in the southeastern part of the State. This is a source of much needed timber.

Adelaide Botanic Gardens

In Australia, the oldest botanic gardens, located at Sydney, Melbourne, Adelaide, and Brisbane have played an important role in the development of cultural life from the very early days of the Commonwealth. At Perth, in Western Australia, now without a botanic garden, we understand that one is soon to be established.

When Surveyor-General William Light laid out the city of Adelaide in 1837, his plan provided for an area to be established as a botanic garden. Although the original site was never developed, the present gardens established in 1855 cover about 45 acres. The soil and climate are considered as "difficult" for growing plants, but despite these alleged shortcomings, a large collection of native and exotic plants are grown. Recently an area of several hundred acres has become available for use of the botanic gardens in the Mt. Lofty Ranges, situated at an elevation of 1,200 feet and only a few miles east from the botanic garden itself. The soil and climate of this mountain station, different from those of the botanic garden, provide an area for expanding the living collections beyond what may be grown successfully in Adelaide.

Principal features of the Adelaide Botanic Gardens include the class and systematic garden, sunken garden, bush house, pools, and fine old specimen trees. For scientific use, a sizeable herbarium and library are available. This is the only botanic garden in Australia with an apprentice training program. A seed exchange list is issued yearly for distribution to other botanic gardens wishing seeds of Australian plants.

Adelaide--Victory Harbor--Tailem Bend

Collecting in South Australia covered about 500 miles over some of the more interesting floristic areas east and southeast of Adelaide. The first trip south from Adelaide took us through Yankalilla to Cape Jervis. This area is given over almost entirely to grazing. Enroute, we stopped at the Skinner-Nixon Reserve, located at Myponga, a small natural preserve where we saw a segment of the native South Australian bush. A plant of particular
interest was *Exocarpus cupressiformis* Labill. (Santalaceae), a small parasitic tree with cypresslike foliage. Other plants of special interest were *Tetratheca pilosa* Labill. (Tremandraceae), a somewhat open shrubby species with showy pink flowers; several woody Leguminosae with showy flowers, including *Acacia pycnantha*, *A. myrtifolia*, and two species of *Daviesia* (*D. pectinata* Lindl. and *D. corymbosa* Sm.); various ornamental
myrtles (Myrtaceae), including Calythrix tetragona and Leptospermum juniperinum Sm.; Astroloma conostephioides F. Muell. (Epacridaceae), a beautiful shrub with needlelike leaves; and two species of sundew (Drosera).

Between Yankalilla and Normanville, the predominant tree of the landscape is Eucalyptus viminalis var. huberiana. A fine specimen of E. forrestiana was observed along the roadside just north of Yankalilla. This mallee-type eucalyptus grows to about 8 feet high with unattractive yellow flowers but with very showy red capsules. In this area, Xanthorrhoea semiplana F. Muell. (Liliaceae) is very common. This is one of the stemless species of grass-tree with leaves about 3 feet long.

Along the Range Road between Normanville and Victor Harbor, a patch of native scrub contains Logania recurva J. M. Black and L. linifolia Schlecht. (Loganiaceae); Spyridium sp. (Rhamnaceae); Baeckea crassifolia Lindl. (Myrtaceae), an upright slender shrub with white or violet flowers; and Banksia ornata F. Muell. (Proteaceae), a shrub 3 or 4 feet tall with relatively large heads of pale yellow flowers.

Near Victor Harbor, we passed through a plantation of the Monterey pine (Pinus radiata), a widely planted introduced tree of the region. On the naturally phosphorus deficient soils of the area, this plant in early life turns yellow and is much retarded in growth. One application of a phosphate compound to a young stand is sufficient to overcome the natural deficiency for normal growth of the trees. We saw Callistemon rugulosus (Myrtaceae), a stiff shrub about 4 feet high growing along the road in a marshy depression.

Near Strathalbyn, Olearia pannosa Hook. (Compositae) was in full flower. This spreading or somewhat rambling shrub, 2 to 6 feet high, has large, thick, woolly leaves to 3 inches long with daisylike flower heads about 2 inches across. The ray-flowers usually are white, but plants with pale pink rays occasionally are found.

After traveling many miles over open, level, marshy country along the banks of Lake Alexandria, late in the afternoon, we crossed the Murray River on the Wellington Ferry, or Punt as it is called there, and arrived in Tailem Bend in time for the evening meal.

Tailem Bend to Loxton

The journey east and thence northeast to Loxton via Karoonda, Mindarie, and Alawoona traversed parklike countryside, with shrubby species of Eucalyptus called mallee covering large tracts interspersed with other shrubby vegetation. About 10 miles east of Tailem Bend we stopped for the first close look at the flora. We found shrubby myrtaceous plants in abundance, including Melaleuca micromera Schau., a shrub about 8 feet high with light yellow flowers; M. acuminata, 4 to 6 feet high with small lavender flowers; and M. pubescens with white to yellowish flowers. Baeckea behri F. Muell. also myrtaceous, was plentiful. This is a tall shrub, 6 feet high with slender stems and white flowers. It is much used for ornamental brush fences in gardens and around homes.

Between Alawoona and Loxton we traveled through some very beautiful countryside covered largely with mallee. The soil is sandy. In this region, Eucalyptus leptophylla Miq., E. oleosa F. Muell. and E. incrassata Labill. are the commonest species. They vary from 6 to 15 feet in height and may be seen in unbroken stretches extending for many miles. The slender multiple stems arising from ligno-tubers (thickened woody base from which stems grow) are of great value to the plant in surviving the frequent bush fires that plague the area. In the early days before roads, many people without adequate vantage
points were lost in the almost unbroken cover of mallee in gently rolling countryside. The slender mallee trunks are too limber to support the weight of a man for climbing. Much of this part of South Australia is now being cleared for cultivation.

Callitris tasmanica (Benth.) Bak. & Sm. (Cupressaceae), one of the conifers native of Australia, is found in this area, along with Lasiopetalum behrii F. Muell. (Sterculiaceae) and Exocarpus spartea R. Br. (Santalaceae). Eremophila crassifolia F. Muell. (Myoporaceae) was seen between Cobera and Alawoona.

At Loxton, we explored the banks of the Murray River that flows through the town. Eucalyptus bicolor grows on the bank of the river down to the water's edge, but it is more plentiful on higher ground above flood level. A fern relative, Marsilea drummondii A. Br. (Marsileaceae), the water-clover, is abundant along the river bank in an area that floods each year.
The Murray River at Loxton, South Australia. (Courtesy of W. H. Hodge.)

Marsilea drummondii (Marsiliaceae), a fern relative, growing on the flood plain of the Murray River, Loxton, South Australia. (Courtesy of W. H. Hodge.)
Loxton--Berri--Adelaide

On the edge of Loxton, we found a very attractive species of Olearia. This subshrub or shrub about 3 feet high was in full flower with white daisylke flower-heads about an inch across. Kochia sedifolia F. Muell. (Chenopodiaceae), the bluebush, was seen several times between Berri and Adelaide. The bluish-gray cast of this species when seen in mass is derived from the characteristic short cottony tomentum that covers the whole plant. Here we saw Halgania lavandulacea Endl. (Boraginaceae), a small shrub with blue flowers, Westringia rigida R. Br. (Labiatae), and Geijera linearifolia (DC,) J. M. Bl. (Rutaceae), the sheep or oil bush.

Private Gardens of Adelaide and Vicinity

Three private gardens of special interest to plantsmen located in Adelaide and vicinity are: (1) Miss Alison Ashby's garden in Blackwood, located in an Adelaide suburb; (2) The Burdette garden, in the Basket Range, located about 15 miles from Adelaide; and (3) The Sanctuary, located in Ashton 10 miles from Adelaide is owned by Mr. F. C. Payne and open to the public for a small fee.

The Ashby Garden, Adelaide

The Ashby garden is well-known for the collection of myrtaceous plants, especially the finest of Callistemon and Melaleuca. Miss Ashby's father began to collect native plants many years ago with a special interest in bottlebrushes. Seeds of Callistemon obtained from this source included the following species: C. phoeniceus, a shrub 8 to 10 feet high with brilliant red inflorescences; C. teretifolius, a spreading shrub to 6 feet or more high with finely divided foliage; C. linearis, a shrub about 8 feet high with dark red to sometimes greenish inflorescences with leaves resembling those of C. pinifolius; C. pachyphyllus, a shrub 8 to 10 feet high with large, showy, red inflorescences. We might expect seeds collected from plants in this garden to produce progenies of hybrid plants, since the callistemons are known to hybridize freely. In fact, the Ashby collection contains some natural hybrids. Species of Melaleuca include M. pentagona, a shrub of about 12 feet high, and M. polycephala, Benth., a small shrubby species. Phymatocarpus porphyrocephalus F. Muell., another myrtaceous shrub in the collection, grows 4 to 5 feet high with heads of reddish flowers resembling Melaleuca. Still other Myrtaceae include Leptospermum squarrosum Sieb., a shrub 8 to 10 feet high with bright pink flowers in dense masses along the stems and Agonis marginata, a tall shrub with soft hairy young branches and white flowers in terminal clusters, Acacia jonesii, a pinnate-leaved species about 4 feet high with golden-yellow flowers was in bloom. Pomaderris ferruginea (Rhamnaceae), an evergreen shrub about 6 feet high, is worth growing for the foliage alone. The leaves are rusty-brown beneath.

The Burdette Garden, Basket Range (Sept. and Dec.)

The Burdette garden is located on a razorback ridge in the Basket Range, about 15 miles from Adelaide. Here the soil is rocky and well-drained. A garden of native Australian
plants and of Proteaceae from South Africa was established by the father of the present owner. White, pink, orange, and yellow-flowered species of Verticordia from Western Australia thrive here. The Waratah (Telopea speciosissima R. Br.), Proteaceae, a native of New South Wales naturalizes on the lower slopes of the property. At the time of our visit in December, Regelia grandiflora Benth. (Myrtaceae) from Western Australia was unequaled among the plants in flower this season. The brilliant red inflorescences are produced on a shrub 6 to 8 feet high with gray-green leaves. A small pink-flowered Stylidium and a Scaevola with lavender-blue flowers are both excellent as ground-cover plants. Protea and Leucospermum, both South African proteas, are grown here commercially for the cut-flower market.

The Sanctuary, Athelston (Sept. and Dec.)

The Sanctuary, owned by Mr. F. C. Payne, located at Ashton, is about 16 miles from Adelaide. This is a hillside garden. Here many native Australian plants mingle with introduced species from South Africa. Outstanding among the Australian plants cultivated are Melaleuca fulgens (Myrtaceae), a vase-shaped shrub about 8 feet high with brilliant red brushlike inflorescences tipped with golden anthers; M. paynei, an alleged hybrid of M. fulgens and M. steedmanii, thought by some to be only a superior selection of M. fulgens; and Anigozanthos rufa Labill. (Amaryllidaceae), a beautiful ruby-red flowered kangaroo-paw about 2 feet high from Western Australia. In September, South African species of Erica were at the peak of flower. A more colorful display could hardly have been anticipated. South African Protea species in flower at this time include Protea and Leucadendron salignum Berg or L. decorum R. Br., the latter a shrub about 3 feet high covered with yellow flower heads 3 or 4 inches across.

Waite Agricultural Institute, Adelaide

(Sept. and Dec.)

Waite Agricultural Institute in Adelaide is one of the outstanding scientific institutions of Australia. The arboretum on the grounds of the Institute possesses a large collection of Eucalyptus species and hybrids obtained from many parts of Australia. The eucalypts native of the region are at home in the arboretum, while some of those introduced from other areas of Australia take less kindly to the temperature and rainfall extremes found here. Two named Eucalyptus hybrids, E. 'Urbrae Gem' and E. 'Augusta Wonder', originated at the Waite Institute from a cross between E. erythronema as the seed parent and an unknown pollen parent. The relatively low-growing habit of the hybrids, both grow 20 to 30 feet high, are recommended over either parent as trees of merit for streets in nearly frost-free areas.

90-Mile Desert

(Coonalpyn--Culbarra--Woods Wells--Coorong--Meningie)

A 3-day trip to the 90-Mile Desert was arranged through cooperation with the Adelaide Botanic Gardens, with two members of the garden staff as our guides, Ray Steward and
Ron Hill. Indeed, we were many times grateful to our hosts for advice in guiding us to the best possible localities and for aid in identifying plants along the way. Our equipment included a Landrover (British version of the Jeep), complete with four-wheel drive, plus auxiliary water and gasoline facilities, all "musts" for travel in the desert and "out-back" country of Australia.

The 90-Mile Desert country is located southeast of Adelaide in the lower tongue of South Australia. The desert interior is covered with low brush and scrub very reminiscent of the chaparral of southern California. With our base at Coonalpyn, the trip covered part of the desert country from Culbarra across to Woods Wells, located on The Coorong, an evil-smelling strip of mud and water about 60 miles long, separated from the sea by a narrow strip of sand dunes. From Woods Wells the trip turned north to Meningie, thence eastward across the desert to Coonalpyn.

Seeds of many plants were collected along the roadside in the vicinity of Coonalpyn. Most notable of the species with ornamental merit were Enchylaena tomentosa R. Br. (Chenopodiaceae), a low, spreading shrub with red or yellow berries, found in very hard dry soil; Callistemon rugulosus, the so-called native pine, a very drought-resistant tree 15 to 20 feet high with lush green foliage; Westringia eremicola A. Cunn. (Labiatea), a 3-foot shrub resembling Rosmarinus, with mauve flowers; Clematis microphylla DC., a vine with white flowers and cottony seed heads, and Lasiopetalum behri (Sterculiaceae), a shrub 3 feet high with thick tomentose leaves and pinkish-green flowers.

The 90-Mile Desert produced still other gems, such as Calythrix tetragona (Myrtaceae), a shrublet, 2 to 3 feet high with star-shaped flowers ranging from white to pink or occasionally yellow. As the flowers of this plant fade in color, the bracts turn brown and become very conspicuous. Gompholobium minor Sm. (Leguminosae), a low spreading shrub about 6 inches high, produces large pea-shaped flowers of a delicate apricot color.

On a short trip to Chauncey Line, near Adelaide, we found Loudonia behri Schlecht. (Haloragaceae), an herbaceous species about 15 inches high with heads of yellow flowers growing in various places along the roadside.
VICTORIA

Stand of mountain ash (Eucalyptus regnans F. Muell.) near head of Ada River, Victoria. The trees average 250 feet in height and 185 years in age. (Courtesy of W. H. Hodge.)
VICTORIA

(Sept. 23-Oct. 6, Dec. 12-20)

Victoria, located on the southeastern tip of the continent, is the smallest State on the Australian mainland (Tasmania is the smallest Australian State). In California, we cultivate more species from Victoria than from other parts of Australia. Many areas of the State are favored by a relatively high rainfall and fertile soil. Farming and grazing, although rewarding occupations in many areas have brought about widespread destruction of vast tracts of the native vegetation. Melbourne is the metropolitan capital of the State with the second oldest botanic garden in Australia.

Collecting was concentrated in three separate areas of the State,(fig. 4).

Figure 4. --Collecting areas in Victoria.
Royal Botanic Gardens, Melbourne

William Robert Guilfoyle was responsible for the present-day design of the Royal Botanic Gardens, Melbourne, founded in 1846. The architectural and landscaping features as they have mellowed together over more than a century are a legacy of the talents of Guilfoyle whose skill has resulted in one of the world's most beautiful botanic gardens. Located in the center of the city on about 100 acres, the gardens are noted for the magnificent old trees, broad well-cared-for lawns, and comprehensive collections of plants. As in most botanic gardens, the exotic species outnumber the indigenous ones. The people of Melbourne are the possessors of a fine cultural legacy of the early pioneers who laid out the city in the early years.

The herbarium of the garden is the oldest and historically the most important in Australia. A new flora of Victoria, in preparation at the garden, will be of great value to scientists and others who wish to know more about the plant communities of the State. The botanical library, started by Baron Ferdinand von Mueller, is extensive and valuable for research purposes. An exchange-list of seeds available to institutions throughout the world is issued from the garden.

Signing of the papers separating the Colony of Victoria from New South Wales took place in these gardens under the now historic "Separation Trees" (Eucalyptus rostrata Schlecht). A very large specimen of the Monterey Cypress (Cupressus macrocarpa Hartw.) grows in the garden.

National Resources Conservation League, Springvale

(October)

We visited the National Resources Conservation League nursery, at Springvale near Mornington, located south of Melbourne along Port Phillip Bay. At this place, trees and shrubs are grown for sale to individuals and groups for replanting denuded areas. Seedlings grown in pine veneer tubes open at both ends are one of the interesting operations used for handling young plants in the nursery. The tubes are made in various lengths to suit the demand. Two sizes were in use—one about 2 inches in diameter and 6 inches long, and the other 3 inches in diameter and 12 inches long. Seedlings grown in this manner are easy to handle for quick packing and shipping and may be transplanted without retarding the growth of the young plants.

At Mornington we visited the park located along the edge of Port Phillip Bay. We saw many fine specimens of Casuarina stricta Ait. (Casuarinaceae), one of the so-called Australian pines, which is about 30 feet high with a round crown. This is an excellent tree for park use. Farther beyond the town limits, along the exposed windy section of the coast, we visited an area of about 5 acres used for experiments on native plants for windbreaks.

Swanson Nursery, Frankston

At Frankston, a suburb of Melbourne, we visited the Swanson Nursery and the growing area for nursery stock and cut-flowers located on the edge of town. Plants of South
Africa and native Australian species are the speciality of this nursery. For color effect, only the wildflower fields of Western Australia surpassed Mr. Swanson's cut-flower beds. In this commercial establishment, we were afforded a splendid opportunity of witnessing the response of native plants to average garden conditions and to see several of the kinds we hope may become established in the United States as a result of the present exploration. We noted that many of the native Australian plants under cultivation respond very well to heavy pruning to encourage increased production of flowers, better habit, and better foliage. An annotated list of outstanding plants seen in this nursery respective of (1) ornamental merit of flowers and habit of plant, (2) potential use as a cut-flower, and (3) adaptability in average garden soils is presented below.

**Banksia ericifolia** L. f. (Proteaceae). A protem native of New South Wales, grows as a shrub, 6 to 8 feet high, with reddish flowers borne in dense "bottlebrushlike" heads 6 inches or more long and about 2 inches across.

**Boronia megastigma** (Rutaceae). Called here Victorian boronia, but a native of Western Australia. The flowers are chocolate-colored on the outside and lemon-yellow inside, with a delicate spicy fragrance that persists after the flowers are cut and dried. The foliage is needlelike.

**B. megastigma** 'Chandler', Chandler's mahogany. A selection of the species with slightly larger flowers, more ruby-red than brownish on the outside. This cultivar appears to be easier to grow and less subject to a black smut that attacks the wild phase of the species.

**B. lutea**. The very attractive flowers are greenish yellow or chartreuse. It is given specific rank by some, but it is probably only a color variation of **B. megastigma**. Like the latter species, it is fragrant.

**B. serrulata** Sm. The native rose of New South Wales. A low mound-shaped shrub about 2 feet high with flat, rhombic leaves and bright pink flowers with the aspect of miniature roses.

**Erica** (collected as **E. ormondii**) (Ericaceae). May be a hybrid of a South African heather with large flowers of vibrant pink. Large quantities of flowers are cut for the trade from plants about 18 inches high.

**Eriostemon obovalis** A. Cunn. (Rutaceae). A shrub with pungent-tipped leaves and single white flowers. There is known a double-flowered cultivar with larger white flowers.

**Leschenaultia biloba** Lindl. (Goodeniaceae). The flowers are said to be the purest blue of all native Australian plants.

**Leucodendron** (L. salignum or **L. decorum**), Proteaceae. A South African protead grows as a shrub about 3 feet high with bright yellow flowers in heads 3 or 4 inches in diameter. Mr. Swanson said that cut blooms last over a long period.

**Thryptomene calycina** (Lindl.) J. M. Bl. (Myrtaceae). A low shrub in the nursery, but in the Grampian Mountains of Victoria where it is indigenous, plants attain 6 to 8 feet in height. The small white flowers are borne in great profusion for 12 inches or more along the stems.

Mr. Swanson makes periodic collecting trips to other parts of the country, Western Australia in particular, in search of seeds and seedlings for trial in his nursery garden.
Mr. B. E. Schubert owns and operates an outstanding nursery of native Australian plants located in Noble Park, a Melbourne suburb. His private garden of native plants provided an excellent opportunity to assess their use and value as plants for home gardens and in general landscape planting. Below is a list of the most noteworthy plants seen in this nursery— all native of Australia.

**Acacia myrtifolia** (Leguminosae). A low compact shrub, 2 feet high and 4 feet across.

**Boronia denticulata** Sm. (Rutaceae). An erect, compact shrub 3 feet high with profuse mauve flowers and bright green foliage. Plants may be pruned severely for use as a ground cover.

**Correa turnbullii** E. Ashby (Rutaceae). The various species of this genus are called the Australian fuchsia. A semierect shrub 4 to 5 feet high and 3 to 4 feet across, with red and green tubular flowers.

**Crowea exalata** (Rutaceae). A spreading shrub, about 3 feet high and slightly more across. A beautiful foliage plant with deep pink waxy flowers.

**Dampiera hederacea** R. Br. (Goodeniaceae), A prostrate shrublet about 6 inches high with sky blue flowers. A good border or edging plant suckering profusely when established.

**Grevillea barklyana** F, Muell. (Proteaceae). A beautiful small tree, 15 to 30 feet high. The bronze-colored foliage of new growth is the most attractive aspect of this plant. It is very fast growing and might be tried as a windbreak. The pale pink flowers are not especially showy. In the wild at Labertouche, located 50 miles southeast of Melbourne, a stand of this species observed growing on a hillside under taller trees would indicate this plant requires some shade and abundant moisture.

**G. juniperina** R. Br. A shrub 3 to 4 feet tall with dark green needle-like foliage, and brilliant red flowers.

**G. linearis** R. Br. A large, spreading shrub, 6 to 8 feet high, nearly everblooming, with pale pink flowers.

**G. 'Porinda Queen'.** A compact shrub about 6 feet high and as wide, with golden-yellow flowers borne in compact clusters, is thought to be a spontaneous hybrid. It is nearly everblooming and useful as a cut-flower for the florist trade and for house decoration.

**Leschenaultia formosa** R. Br. (Goodeniaceae). A low diffusely spreading shrub from Western Australia with finely dissected succulent foliage and brilliant red and orange flowers. Selections of this fine plant for better flower color and habit are now under development.

**Lobelia anceps** Thunb. (Lobeliaceae). A ground-cover plant, about 6 inches high with pale lavender-blue flowers, blooms over long periods. It grows successfully under conditions of drought, although the plant is native of wet areas.

**Pratia puberula** Benth. (Lobeliaceae). A creeping, prostrate perennial about 1 inch high. The mauve-colored flowers are produced almost continuously from spring to autumn. This plant should be tried as a substitute for a grass-lawn and in other areas infrequently tread upon by foot.
As compared with some other areas of the world, the Australian flora is relatively little known to plant breeders and others as a source of ornamental plants for parks, gardens, and the florist trade. It is gratifying to see among people, such as Mr. Schubert and others in Australia, a lively interest in developing hybrids and other types of selection using as source material the magnificent wild flora of Australia.

The Grampian Mountains—Little Desert—Bendigo

Our first trip to the Little Desert and the Grampians in late September, during the height of flowering, was for the purpose of marking specific plants of species from which we hoped to obtain seeds on a return visit to the area in December. This area is located to the northeast of Melbourne. Points touched enroute included Bacchus Marsh, Ballarat, Ararat, Stawell, Horsham, and Dimboola, located about 200 miles from Melbourne near the border of South Australia. The whipstick country near Bendigo, located approximately 100 miles northwest of Melbourne, was visited before the return to Melbourne.

The town of Ballarat is a center for growing fine tuberous begonias. A hill near Ararat provided an excellent view of the adjacent flat countryside and our first glimpse of the Grampian Mountains in the far distance. Several bodies of water in view we learned later are salt lakes. At Wall, located between Horsham and Dimboola, we visited the Wimmera Forest Nursery. The next morning we headed for Kiata and the Little Desert, located 12 miles west of Dimboola.

The Little Desert produced little of interest, largely because of a disastrous fire that had burned over the area 2 years ago. An interesting species of Acacia, about 6 feet high, was seen in a pasture outside of Kiata.

At Mt. Arapiles, located near Horsham, our visit was more rewarding. Here Eriostemon obovalis A. Cunn. (Rutaceae) in full flower was a splendid sight. This 4-foot high evergreen shrub with succulent, aromatic leaves produces white to pink flowers that resemble small single roses about a half inch in diameter. On our return trip for seeds in December, it was disappointing to find only 12 capsules of this plant.

The trip into the Grampian Mountains was rewarding for the large number of species of ornamental value we saw, although in the time available, we could cover only one small area. Eucalyptus melliodora A. Cunn. is an attractive medium-sized to large tree with a round crown, specimens of which we saw growing in pastures. Perhaps the finest plant in flower was Thryptomene calycina, a vase-shaped myrtaceous plant, the long slender stems of which are covered with small white flowers for a distance of 2 or 3 feet back from the branch tips. Special conservation patrols are detailed to this region at flowering time to prevent vandalism by commercial people wishing to sell the flowering branches as a cut-flower.

In the Grampians, Epacris (Epacridaceae) occurs in wetter areas. These are small heathlike shrubs, with some highly ornamental members among the more than 20 Australian species. The epacris-family with a close relationship to the heath-family (Ericaceae) is best developed in Australia with nearly 25 genera and over 300 species. Many of the species with merit as ornamentals deserve to be brought to the attention of horticulturists, gardeners, and florists. Unfortunately, Epacris and other members of the family are not easy plants to grow in cultivation.
Investigations are needed to learn more about cultural techniques and how to handle the very small seeds that are characteristic of this family. The species observed in the Grampians with flowers varying from pure white through pink to rosy-red may be only color varitats of _Epacris impressa_ Labill. Another epacrid is _Astroloma pinifolium_ Benth. found in open places in rather sandy soil among taller shrubs. It attains height of about 2 feet with the aspect of a very dwarf or creeping pine. The stems are densely beset with needlelike leaves about an inch long. The tubular flowers are yellow, tipped with green; the fruit also is green.

After leaving the Grampians, our next stop was Bendigo, located about 80 miles northwest of Melbourne on the edge of the "whipstick" country. Predomaint among the woody vegetation of this area are shrubby species of _Eucalyptus_, often called mallee, but in this area thickets of these plants are called whipstick scrub, hence the name. Commonest eucalyps of the whipstick are _E. polybractea_ R. T. Bak., _E. viridis_ R. T. Bak., _E. behriana_ F. Muell., and _E. incrassata_ Labill., which compose the upper story of vegetation. Understory trees and shrubs consist of _Acacia retinodes_ Schlecht., _Melaleuca decussata_ R. Br., _Casuarina lepidophloia_ F. Muell. and _Exocarpus cupressiformis_. In the middle 1880's, Bendigo was the center of a gold rush which extended into the whipstick country. Following the decline of this short-lived industry, the country returned virtually to the uninhabitated condition of pre-goldrush days. Since the 1920's, when the rendering of eucalyptus oil came into prominence using the native species of the region, especially _E. polybractea_ and _E. viridis_, large areas have been deforested solely as a source of eucalyptus oil. One distillery was in operation at the time of our visit.

Plants of the whipstick that attracted our attention other than the shrubby species of _Eucalyptus_ were _Caladenia carne_ R. Br., a beautiful terrestrial orchid with deep pink flowers found in open areas of _Melaleuca_ scrub, and _Grevillea wilsonii_ which here grows to 12 feet high as compared with plants only 3 to 4 feet high as seen in Western Australia. _Westringia crassifolia_ (Labiate), a rare recently described species, grows with _Melaleuca decussata_. A shrubby unnamed species of _Prostanthera_ also of the Labiate, about 5 to 6 feet high with showy pale lavender to white flowers grows in this locality.
The Brisbane Ranges

The Brisbane Ranges are low hills situated about 40 miles northwest of Melbourne. The region consists largely of a plateau with undulating terrain about 15 miles long north to south and about 6 miles wide. To the east the plateau breaks off rather abruptly into a series of deep gullies. The underlying soils are Ordovician sandstone and slates capped with Tertiary layers in a number of places. At the southern end with an elevation of about 600 feet near Anakie and Maude, the hills rise abruptly to the northern end with an elevation of nearly 1,100 feet. Mt. Wallace, with an elevation of 1,588 feet, is the highest summit of the Brisbane Ranges. Plants endemic to this relatively small area include Acacia aculeatissima Macbr., a small trailing shrub, perhaps useful as a ground-cover; A. aspera, a shrub 4 or 5 feet high and about as wide, with dense foliage and bright yellow flowers; and A. mitchellii, a very showy erect shrub about 6 feet high. Bredemeyera volubilis (Steetz) Chod. (Polygalaceae), the love-creeper, is a twining plant found at the base of shrubs and trees. The small skyblue flowers with darker blue keels are produced in spring.

Excursions for Seeds

In December, which is late spring and early summer in Victoria, we attempted to revisit areas for seeds of the most outstanding plants seen in flower on the earlier excursions of September.

Wimmera Forest Nursery, Wail. Following are the ornamental plants of greatest merit seen at this station:

Acacia howittii F. Muell. A spreading tree to 20 feet high, sometimes higher, with slightly pendulous branchlets. Grown for its soft fernlike foliage, it is a native of an area with 30 to 40 inches of rainfall.

A. ligulata. A small tree to 15 feet high, rather weeping in habit, with bright yellow flowers, is a desert or semi-desert species recommended for specimen planting.

A. montana. A shrub 6 to 8 feet high is recommended for heavy soils in areas of 14 to 15 inches of rainfall; very good as a windbreak.

A. pycnantha. Two forms are grown at Wail, one with weeping branches and another flowering at least 2 months before the type.

Eucalyptus erythronema. A tree about 20 feet high with a good habit and crimson flowers.

Eucalyptus hybrid. Seeds were obtained from the Wimmera Forest Nursery of the hybrid E. erythronoma X E. steedmanii. The F₁ seedling plants in the nursery are bushier than either parent with very showy pink flowers.

Hakea multilineata (Proteaceae). A variable species. A superior cultivated phase of the species grown at the Wimmera Forest Nursery is about 8 feet in height and as much in diameter. It is densely branched, with pink flowers.
Indigofera australis Willd. (Leguminosae). A shrub, 3 to 6 feet high, of bushy habit in cultivation, with pinnate leaves and pink pea-shaped flowers. A widely grown ornamental with flowers among the most showy of all plants seen in Australia. It thrives in areas differing widely in kinds of soil and in amount of precipitation.

Melaleuca wilsonii F. Muell. (Myrtaceae). Grown as a hedge at the Wimmera Forest Nursery, 4 to 5 feet high and as wide, with mauve flowers. Plants of this species grown in California have reached about 2 feet in height.

Thomasia macrocarpa Hueg. (Sterculiaceae). A small bushy shrub, usually not over 3 or sometimes up to 5 feet high. Flowers in the autumn.

Lindner's Farm, Vectis South

The farm of Mr. A. E. Lindner at Vectis South is located 10 miles west of Horsham. Seed was obtained of the following species from the extensive collection of native plants grown here:

Callistemon pinifolius (Myrtaceae) is a very attractive shrub, 6 or 7 feet high with nearly terete leaves 3 to 5 inches long and yellow-green flowers.

Correa aemula F. Muell. (Rutaceae). An open shrub 3 to 5 feet high; leaves rough, 2 to 3 inches long; flowers tubular, pendulous and blue-green. This variable species is deserving of special attention by plant breeders, who should endeavor to produce by selection better color mutations of this highly ornamental plant.

Hakea ruscifolia (Proteaceae). An erect shrub 6 to 8 feet high with rigid, sharp-pointed leaves and dense clusters of white flowers along the upper portion of the stems. Prefers sandy or gravelly soils.

Second Visit to the Grampian Mountains

The return trip to the Grampians was for seed of plants we saw in flower on the earlier trip in September. A good amount of seed was obtained, but insects had taken their usual toll of the crop as we had found to be the situation in other collecting areas visited in Australia. Among the plants collected, the following species are those with special merit as ornamentals—all collected in the area between Hall's Gap and the end of Sundial Road:

Boronia pinnata Sm. (Rutaceae). A shrub, 2 to 3 feet high with pinnately divided leaves and pink flowers.

Leptospermum lanigerum Sm. (Myrtaceae). A form of the species with flowers about an inch across, found only in the Grampians, is perhaps the finest of the leptospermums seen in Australia.

Sprengelia incarnata Sm. (Epacridaceae). A shrub three to ten feet high with small stiff pungent-tipped leaves and pink flowers about one-half inch wide.
Once out of the Grampians, the quest for seed took us south on the Dunkeld Road over the Sierra Range via the Sierra Road, thence to Dunkeld and west to Hamilton. Grevillea oleoides var. dimorpha seen along the Sierra Road is an open, rather sparsely branched shrub with glossy leaves and bright red flowers. Its value will probably be in breeding work, although it may be possible to select superior forms.

We crossed the border of Victoria via Hamilton into South Australia for a short visit to the garden of Mr. K. Stuckey, located south of Penola at Furner. The Stuckey garden consists mostly of Australian plants, with species of Prostanthera (Labiatae), Leschenaultia (Goodeniaceae), Anigozanthos (Amaryllidaceae), Westringia (Labiatae), and many others in flower at the time of our visit.

We returned to Melbourne via Warnambool, Lavers Hill, Beech Forest, and Geelong. Tree ferns were a notable part of the Beech Forest.

The Dandenong Ranges

Several interesting trips were made into the Dandenong Ranges, located about 25 miles east of Melbourne. These hills rise to an elevation of about 2,000 feet with a varied terrain reminiscent of parts of northeastern United States, but without snow or extreme frost. Azaleas, maples, conifers, and many other plants familiar to us are grown in the gardens of the Dandenongs. Of special interest are the native plants with ornamental value, such as Stylidium graminifolium (Stylidiaceae), one of the so-called trigger plants, with rather broad grasslike leaves and spikes of pink flowers a foot or more in height. Brunonia australis, found here, is a unique member of a monotypic family, Brunoniaceae, known only in Australia. It is a perennial with rosettes of spatulate leaves at the base and deep blue flowers in capitate heads on scapes 6 inches to sometimes over 1 foot long. It is an attractive plant resembling Scabiosa. Also growing here is Viola hederacea Labill., with blue flowers, one of the nearly half dozen native violets found in Australia.

Labertouche

Labertouche is located about 50 miles southeast of Melbourne. Of special interest were the following species collected with ripe seed:

Acacia oxycedrus Sieb., Leaves needlelike. A good foliage plant.
Banksia collina (Proteaceae). A shrub about 8 feet high, dense and bushy.
Bauera rubioides (Saxifragaceae). A dwarf form of the species.
Boronia muellericheel (Rutaceae). A shade-loving shrub 4 feet or more high with pinnate leaves. Its pink flowers are valuable for cutting.
Epacris impressa (Epacridaceae). A form with fine red flowers. Occurs in open eucalyptus forest in coarse granitic soil, moist in summer and wet in winter.
Grevillea barklyana F. Muell. (Proteaceae). A small tree about 15 feet high, with handsome foliage.
The Australian snow gum *Eucalyptus niphophila* growing on subalpine slopes near Canberra, A.C.T. This attractive tree, recently introduced, is one of the hardiest eucalypts. (Courtesy of W.H. Hodge.)
The Australian Capital Territory (A.C.T.), with an area of 911 square miles, was carved out of New South Wales in 1911 as the seat of the Australian federal government. Canberra is the capital of the Commonwealth and headquarters of the Plant Introduction Section of Commonwealth Scientific and Industrial Research Organization (C.S.I.R.O.). The basic itinerary of the Australian tour was planned under the auspices of this organization through Mr. William Hartley, Principal Plant Introduction Officer. We were helped very considerably throughout the trip by C.S.I.R.O. wherever branch offices occur, usually in each capital city of the various states.

Canberra, located on the northern edge of the A.C.T. lies in the middle of a once wind-swept plain, more recently transformed into an attractive cosmopolitan city with broad streets, which in many instances are planted with introduced trees of countries represented by the various embassies quartered here.

Outside Canberra the A.C.T. is rural and much of the native vegetation is still intact. Some areas have been cleared, and one sees large tracts on steep hillsides being planted to Monterey pine (Pinus radiata).

In January, we made a collecting trip through parts of A.C.T. to the Mt. Franklin area via Cotter Dam, an area of relatively rough hilly terrain. Plants found here of special interest are:

Bedfordia salicina DC. (Compositae). A broad-leaved shrub 8 to 10 feet high with flower-heads all discoid, with yellow florets.

Brachycome sieberi DC. (Compositae). A perennial herb with a rosette of leaves at the base has slender stems about 1 foot high. The daisylike flower heads 1 or 2 inches across are provided with lavender ray-flowers.

Exocarpus cupressiformis (Santalaceae). Seed was obtained.

Lissanthe montana R. Br. (Epacridaceae). An ascending shrub 2 to 12 feet high with white flowers and red fruit.

Olearia erubescens (Compositae). An evergreen shrub to about 3 feet high with white, daisylike flower-heads. Young growing shoots are red.

O. lyrata. An evergreen shrub 4 to 5 feet high with white, daisylike flower-heads.

Veronica perfoliata (Scrophulariaceae). A woody subshrub about 2 feet high with glaucous leaves and racemes of violet flowers.
Dicksonia antarctica Labill., tree-ferns growing in Eucalyptus woodland, Clyde Mr., New South Wales.
(Courtesy of W. H. Hodge.)
New South Wales is the oldest of the Australian States and Sydney, the capital city, has become the commercial center of the Commonwealth (fig. 5).

The initial trip to Sydney from Canberra followed the coastal route via Braidwood to Bateman’s Bay, Ulladulla, and Bulli Point, thence to Sydney (fig. 6). Between Canberra and Braidwood the countryside is open slightly rolling terrain, mostly treeless with a ground cover of grasses and other herbaceous plants.

The coast range begins just east of Braidwood. Here, on the Western slopes, the forest is composed largely of Eucalyptus maculata Hook. In several localities the cycad, Macrozamia spiralis Miq. (Cycadaceae) forms a nearly solid understory. This interesting

Figure 5.--Collecting areas in New South Wales.
practically stemless, or sometimes short-trunked, plant produces a dense rosette at the crown of the plant of palmlike leaves 2 to 4 feet long. The fruiting-cones that rise out of the rosette of leaves contain large seeds which are brilliant orange-red.

On the eastern slopes of the coast range, we passed through tree-fern forests. Along the coastal route, just north of Ulladulla, we saw for the first time the turpentine tree (Syncarpia glomulifera), Myrtaceae. It is a tree about 20 feet high. Gompholobium grandiflora Sm., a very large-flowered shrubby legume, was common along the roadside.

At Nowra, we diverted the route slightly with a short trip inland to the Cambewarra Mountains for a short inspection of the vegetation growing there. The terrain is very steep with a dense covering of evergreen shrubby vegetation covering part of the area. The Australian cabbage-palm (Livistona australis Mart.) and an occasional Eucalyptus are the principal trees. Large clumps of the epiphytic orchid, Dendrobium speciosum Sm., with racemes of showy creamy yellow flowers were observed growing in the eucalyptus trees.

We proceeded north, still along the coast, through the scenic Kangaroo Valley, an agricultural area, to Bulli Point. In the National Park north of Bulli Point, Doryanthes excelsa Correa (Amaryllidaceae) is a prominent plant of the bush. This striking member of the amaryllis family with broad straplike leaves about 4 feet long, produces a globular head of red flowers about 1 foot in diameter at the summit of leafy stalks 8 to 10 feet long; the flowers are each subtended by colored bracts. This species occurs only in New South Wales. The other species of the genus, D. palmeri W. Hill, occurs in Queensland. Both species are cultivated in California. Species of Patersonia (Iridaceae) and a terrestrial orchid, perhaps a Thelymitra, with lavender and pink flowers, were the most common herbaceous plants seen in this part of the park.
Author collecting seed of *Macrozomia spiralis*, a cycad, east of Braidwood, New South Wales. (Courtesy of W. H. Hodge.)

Spotted gum forest (*Eucalyptus maculata*) with solid understory of *Macrozamia spiralis*, Clyde Mt., New South Wales. (Courtesy of W. H. Hodge.)

Australian cabbage palms (*Livistona australis*) on slopes of Cambewarra Mr., New South Wales. (Courtesy of W. H. Hodge.)

*Isopogon anethifolius* (Proteaceae) with bright yellow flowers is common in sandy coastal soil, New South Wales. (Courtesy of W. H. Hodge.)
The site of the Royal Botanic Gardens, Sydney, has been associated with the development of Australia from the first settlement in 1788, when the beginnings of agriculture and horticulture were started on the location now occupied by the botanic gardens. As originally conceived, botanic gardens in Australia were established to grow and test the native plants for possible use such as for food and fiber, and to import and test plants from other countries for the same purposes.

The modern gardens began in 1816 with Charles Fraser, appointed to supervise their development. Today the gardens spread over 66 acres on the foreshore of Port Jackson divided between the Upper Garden, Middle Garden, Lower Garden, and the Garden Palace Grounds. The Middle Garden is the oldest part where the earliest cultivation began.

The horticultural wealth of the living collections is perhaps culminated in the large collection of palms that thrive in the subtropical climate of Sydney. Individual specimen trees of other plants are a noteworthy feature. Among these we should mention a 30-foot high specimen of Podocarpus falcatus R. Br. ex Mieb. (Podocarpaceae), a conifer of the southern Andes of South America, which, to our judgment, ranks supreme among the
specimen trees seen in the garden. We could recommend this beautiful species for use along streets, in parks, and garden planting. _P. falcatus_ resembles _P. gracilior_, an African species, now grown in southern California, but differs from it chiefly in the somewhat stiffer coarser habit.

**Trips from Sydney**

**Ku-ring-gai Chase**

The Ku-ring-gai Chase, located a few miles northwest of Sydney, is an interesting site to visit in the Hawksbury sandstone region, an area set aside as a natural preserve for plants, birds, and the Koala bear. Here we saw the Waratah, _Telopea Speciosissima_, Proteaceae, the state flower of New South Wales. This highly attractive protead is an evergreen multiple-stemmed shrub to 6 feet high with large heads of bright red flowers. In the wild the Waratah prefers the light shade of ravines, although in cultivation near Gosford we saw this plant thriving in light sandy soil in full sun.

_Boronia serrulata_ (Rutaceae), the so-called "native rose," occurs in the Ku-ring-gai Chase area. This beautiful plant forms a low somewhat spreading shrub to 2 feet high with rhombic leaves that resemble phyllodia. The common name is in allusion to the bright pink double flowers that simulate miniature roses. The flannel flower (_Actinotus helianthi_), Umbelliferae, found here, is an erect, uniformly gray-woolly perennial herb about 2 feet high with a showy involucre of 10 to 18 colored, softly tomentose bracts that sub-tend the flower umbels. It may be grown as an annual in climates with frost. It makes an excellent cut-flower.

**Dripstone**

A cursory examination of the extensive catalogue of native seeds and plants offered by G. F. Althofer, suggested the desirability of visiting his nursery at Dripstone, located 50 miles from Dubbo, a 250-mile airplane ride from Sydney. Although an establishment modest in proportion, a large collection of highly interesting native Australian plants is cultivated by Mr. Althofer as might be
expected from a connoisseur plantsman. Plants in flower specially noted in Althofer nursery are:

**Acacia flexifolia** A. Cunn. A white-flowered species.

_Grevillea_ (Proteaceae).


_G, brevicuspis_ Meissn., A shrub is up to 4 feet high with white flowers.

_G, rosmarinifolia_ A. Cunn., A form collected by Mr. Althofer in a cemetery at Quantoon, Victoria.

_Mimulus repens_ R. Br. (Scrophulariaceae) A good lavender-flowered creeper.

_Olearia gunniana_ or _O, stellulata_ DC. (Compositae). A shrub up to 5 feet high with heads of daisylike pink flowers about an inch across.

_Phebalium glandulosum_ (Rutaceae). A shrub about 4 feet high with showy yellow flowers in corymbs.

_Swainsona oroboides_ F. Muell. (Leguminosae). A low plant about 6 inches high with violet flowers in a very short raceme or nearly umbellate.

---

Golden-glory pea, _Gompholobium latifolium_ Labill., a handsome legume of the coastal sandstones, Ku-ring-gai Chase, New South Wales. (Courtesy of W. H. Hodge.)
Goonoo Forest near Dubbo

A very interesting trip was arranged by a group of field naturalists in Dubbo for a trip to the Goonoo Forest. This is an area composed of sandstone and ironstone derived soils dominated largely by species of Eucalyptus. Plants observed in this area with potential as ornamentals are Acacia cardiophylla A. Cunn., A. difformis R. T. Bak., A. hakioides, and A. spectabilis A. Cunn.; Daviesia asciularis Sm. (Leguminosae); Eucalyptus sideroxylon A. Cunn.; Kunzea parvifolia Schau. (Myrtaceae); Melaleuca uncinata R. Br.; Phebalium stenophyllum F. Muell. and P. glandulosum Hook. (Rutaceae); Pultenaea boormanii Williams (Leguminosae).

Khyber Pass, near Rylestone

The Khyber Pass, a rocky outcrop located about 100 miles northwest of Sydney near Rylestone, was visited during our trip to Dripstone. The Khyber Pass area is dominated by various species of mallee (Eucalyptus). Echium plantagineum, a native of southern Europe, is naturalized over hundreds of acres of pastureland. The orchid, Dendrobium speciosum, with pendulous racemes of creamy-yellow flowers made a fine showing from the crevices of rock ledges. A species of Stylidium 2 to 3 feet high with narrow leaves and pink flowers carpeted sizeable areas where the mallee scrub had been burned over. A pink-flowered Boronia also occurred.

Along the Rylestone Dam road we saw patches of a creeping species of Isotoma (Campanulaceae) with pale blue flowers. Dodonaea boroniaefolia G. Don (Sapindaceae), a shrub 4 to 5 feet high and nearly as broad with showy capsules is a very attractive species of this genus already well-known by D. viscosa, a useful drought-resistant shrub grown in California. Hibbertia serpyllifolia R. Br., a shrub with a spread of 3 feet with yellow flowers, occurs near running water; it stands clipping for use as a ground-cover.

Mt. Kosciusko

A 3-day trip to Mt. Kosciusko, located in the Australian Alps, was arranged through cooperation we received while at Canberra. From Canberra, our route took us south via Bredbo to Cooma where we visited the headquarters for the Scientific Services Section of the Snowy Mountain Scheme. This organization is concerned with replanting cutover and denuded watershed areas as a water conservation project. At Cooma, Dr. M. E. Phillips joined us for the trip to Island Bend and Mt. Kosciusko.

Between Canberra and Jindabyne, the terrain is open rolling pastureland with Eucalyptus parviflora F. Muell., E. rubida Deane & Mail., and E. stellulata Sieb. the most common trees of the region. In the lower foothills approaching the upland area near Island Bend, we saw Veronica perfoliata and V. derwentia, the latter a woody herbaceous species with 3-foot stems and racemes of white flowers, bluish in bud.

Mt. Kosciusko located in the southeastern corner of New South Wales near the border of Victoria with an elevation of 7,300 feet, is the highest summit in the Australian Commonwealth. On the mountain itself the only trees are stunted and twisted specimens of Eucalyptus.
niphophila, the snow gum. Plants seen of particular note in the upland regions approaching and on Mt. Kosciusko are as follows:

Bossiaea foliosa A. Cunn. (Leguminosae). A shrub 1 to 4 feet high with golden-yellow pea-shaped flowers produced in great abundance.

Bredemeyera retusa (Steetz) Chod. (Polygalaceae). A perennial herb up to 5 inches high with heliotrope-colored flowers.

Celmisia longifolia Cass. (Compositae). An herb about 18 inches high with gray, tufted radical leaves and heads of white daisylike flowers.

Epacris (probably E. petrophila Hook. f.). An evergreen shrub, 8 to 10 inches high with masses of white flowers.

Grevillea australis R. Br. (Proteaceae). A neat, compact shrub about 2 feet high with beautiful foliage and less attractive white flowers.

G. victoriae F. Muell. A shrub about 4 feet high with thick leaves, brownish-tomentose on underside and red flowers. A relatively cold-tolerant species.

Helichrysum hookeri (Sond.) Druce (Compositae). An evergreen shrub, about 2 feet high with very minute leaves and clusters of white flower-heads at the ends of short branches; found in a cold swampy area.

H. secundiflorum N. A. Wakefield. A shrub 2 to 3 feet high with heads of white flowers in clusters. A fine species.

Kunzea muelleri Benth. (Myrtaceae). A prostrate wide-spreading shrub, 3 to 4 inches high and several feet across, with pale yellow flowers.

Linum marginale A. Cunn. (Linaceae). A rather sprawling herb, 12 to 15 inches high with blue flowers.

Microseris scapigera Sch. - Bip. (Compositae). An herbaceous perennial, 8 to 10 inches high, with tufted basal leaves and yellow daisylike flower-heads.

Olearia erubescens (Compositae). A shrublet, 12 to 15 inches high with daisylike heads of white flowers.

O. megalophylla. An evergreen shrub about 2 feet high with thick leaves and heads of white daisylike flowers.

O. myrsinoides F. Muell. A low shrub about 18 inches high, broader than tall, with heads of daisylike flowers.

Orites lancifolia F. Muell. (Proteaceae). An evergreen shrub, 2 to 4 feet high with spikes of white flowers.

Oxylobium ellipticum R. Br. var. alpinum (Leguminosae). A low spreading to ascending shrub, 10 to 12 inches high and several feet across, with numerous orange-yellow papilionaceous flowers.

Prostanthera cuneata Benth. (Labiatae). A spreading evergreen shrub, about twelve inches high and three feet or more across. The mint-shaped flowers are white with a slight lavender tinge. Very attractive.
Veronica nivea Lindl. (Scrophulariaceae). An herbaceous perennial, 15 to 18 inches high with pale lavender flowers. Very attractive.

Wahlenbergia gloriosa Lothian (Campanulaceae). A low herb about 6 inches high with campanulalike flowers, nearly gentian-blue in color. Found along road near Island Bend.

Wildflower fields on Mt. Kosciusko, New South Wales, (Courtesy of Australian National Travel Association.)
Archontophoenix cunninghamiana H. Wendl. and Drude in rainforest at Mt. Glorious, Maiala National Park, Queensland. (Courtesy of W. H. Hodge.)
QUEENSLAND
(Oct. and Jan.)

Two separate trips were made to Brisbane, located in the southeastern corner of Queensland. (fig. 7). The climate here is warm-temperate to subtropical with comparable vegetation to been seen in gardens and parks of the area. Jacaranda, for instance, is a favorite introduced tree. On both visits to Brisbane, the botanic gardens were the principal center in our search for ornamentals. Although in past years these gardens have suffered from lack of interest and in public support, an interesting collection of plants is growing in the garden under the guidance and enthusiastic interest of the current director, Mr. H. M. Caulfield. The gardens are again returning to normal as a cultural asset of the Brisbane community.

The botanic gardens of Brisbane were started in 1855 under government sponsorship, which continued until 1925 when the gardens were turned over to the Brisbane City Council.

Figure 7.—Collecting areas in Queensland.
The gardens cover approximately 46 acres on the banks of the Brisbane River, located about \( \frac{1}{4} \) mile from the center of the city.

On the first trip to Brisbane in October, we visited Mt. Glorious, located 30 miles northwest of the city for a brief survey of the rainforest vegetation found there. Unfortunately, most species seen were not in flower at the time of our visit.

We visited Southhampton, located 50 miles southeast of Brisbane on our second visit to Queensland in quest of *Macadamia ternifolia* F. Muell. (Proteaceae), the Queensland or macadamia nut. We learned that most of the selections grown here have already been introduced to Hawaii.

On our treks to the hinterland of Queensland the weather was either inclement or plants of interest were not in flower or fruit at the time of our visit. By virtue of our good relationships with the botanic gardens in Brisbane, seed was obtained of some choice items we had seen in the adjacent countryside.

*Tecomanthe venusta*, a handsome bignoniaceous creeper from New Guinea observed in the Botanic Garden at Brisbane, Queensland. (Courtesy of Longwood Gardens, G. Hampfer.)
ENUMERATION OF THE INTRODUCTIONS

A

ACACIA SPP.
255674 (S-428) LEGUMINOSAE. Dwarf spreading shrub to 3' high or sometimes more. From garden of F. C. Payne, Athelstone, South Australia.

256094 (S-197) Small tree to 15' high with somewhat pendulous branches; flowers bright yellow. Desert or semidesert species. Donated by Wimmera Forest Nursery, Wail, Victoria.

ACACIA ACINACEA Lindl.
256081 (S-249) Gold-dust Wattle. Dry stony slopes with east or northeast aspect, Djerriwarrh Creek, Victoria. Glabrous, diffuse shrub 3 to 5' high with clear yellow flowers. Donated by Nigel Quick, 5 Tintern Rd., Toorak, Victoria.

ACACIA ARGYROPHYLLA Hook.
256186 (S-311) Shrub to 8' high and spreading. Donated by Adelaide Botanic Gardens.

ACACIA ASPERA Lindl.
256637 (S-459) Exposed places in podzolic soils in northeastern part of Brisbane Ranges, Victoria. Spreading shrub or small tree to 7' high and 8' across; branches numerous; phyllodes linear to linear-lanceolate; flowers bright yellow; pods and foliage covered with very sticky glandular hairs. Good ornamental; useful for hedges. One of the better dwarf symmetrical acacias.

ACACIA AURICULIFORMIS A. Cunn.
256264 (S-541) Small tree with glaucous phyllodes; large pods twisted, coiled and somewhat ear-shaped; flowers in spikes, about 3" long. Donated by Brisbane Botanic Garden.

ACACIA BEAUVERDIANA Ewart
255019 (S-51) On calcareous loam, Widgiemooltha, midway between Norseman and Coolgardie, Western Australia.

Shrub, densely branched, 8' high, with pinelike leaves, the phyllodes approximately 3" long. Typical semiarid scrub acacia from an area with a rainfall of 10" per annum; should make attractive dry climate garden shrub; seeds germinate easily; plants intolerant of wet conditions.

ACACIA BIDENTATA Benth.
256546 (S-702) Native of Western Australia. A spreading almost prostrate under-shrub with yellow flowers. Purchased from G. W. Althofer, Dripstone, New South Wales.

ACACIA BIDWILLII Benth.
256430 (S-545) Tree to 20' high; flowers pale yellow. Collected in Northern Territory by W. G. Trapnell, Brisbane Botanic Gardens.

ACACIA CASIELLA Maid. & Blakely
256630 (S-52) Endemic of Mudgee-Gulgong area, New South Wales. Tall spreading shrub, very compact with masses of pale yellow flowers; leaves glaucous. Purchased from G. W. Althofer, Dripstone, New South Wales.

ACACIA CONGESTA Benth.
263752 Near the highway between Perth and Albany, Western Australia. Prostrate shrub to 4' across, with small ovate leaves and spinescent branchlets. Donated by the Commonwealth Scientific and Industrial Organization, Canberra.

ACACIA DRUMMONDII Lindl.
256265 (S-519) Shrub to 3' high, with pinnate leaves and catkinlike flower-heads. Recommended as a tub or pot plant, although not an easy plant to grow; requires perfect drainage. Donated by H. G. Kershaw, St. Ives, New South Wales.

256638 (S-229) Small shrub 4' to 6' high; leaves small, bipinnate, light green; flowers in spikes about 1" long, golden-yellow. Good specimen shrub suitable for mild climates with a rainfall of 20" per annum. Donated by Wimmera Forest Nursery, Wail, Victoria.

1 As seeds, unless otherwise indicated.
2 Plant Introduction (P.I.) number, U. S. Department of Agriculture.
3 Collector’s field number.
ACACIA EUTHYCARPA J. M. Black
256668 (S-313) In light soils, widespread in southern South Australia. Shrub 5' to 6' high of open habit. Donated by Adelaide Botanic Gardens.

ACACIA FEROCIOR Maid.
256748 (S-742) 3.5 mile from Coorow on Greenhead Road, Western Australia. Low shrub, 2' to 3' or more across, very spiny.

ACACIA FRAGILIS Maid.
254927 (S-43) Stringybark Wattle. On light yellowish loam, 10 mile south of Muntadgin and south of Merredin in eastern wheat belt. Very ornamental small slender tree to 18' high with long golden-yellow flowers and very narrow phyllodes. The brown bark recoils in masses of woolly fibers. Easily grown from seed.

ACACIA GLANDULICARPA F. M. Reader
256639 (S-234) Very compact symmetrical shrub 4' to 5' high, to 8' across; phyllodes small, to 3/4" long, undulate, deep green; flowers golden-yellow; an excellent ground-cover. Grows best in sandy soil. Donated by Wimmera Forest Nursery, Wail, Victoria.

ACACIA HAKEYOIDES A. Cunn.
256083 (S-195) Hakea-Wattle. Spreading shrub to 6' high and 8' across; leaves somewhat yellowish; flowers bright yellow; recommended as a good specimen shrub in desert and semidesert areas. Usually very floriferous. Donated by Wimmera Forest Nursery, Wail, Victoria.

ACACIA HAKEYOIDES A. Cunn. (introduced as var. angustifolia)
260807 Collected by William Perry, Bendigo, Victoria.

ACACIA JONESII Muell. & Maid.
255667 (S-430) Pinnate-leaved shrub to 4' high with golden-yellow flowers. Prefers light soil. From garden of Miss Alison Ashby, Blackwood, South Australia.

ACACIA LIGULATA A. Cunn.

ACACIA LINIFOLIA var. PROMINENS (A. Cunn.) Moore
256431 (S-536) Native of southeastern Queensland. Tree 15' to 20' high, broad-headed with bright yellow flowers. Donated by Brisbane Botanic Gardens.

ACACIA LINOPHYLLA Fitzg.
255020 (S-178) Bogata. In barren soils in very arid districts, Naalbara Station, upper Murchison, West Australia. Tree to 20' high or sometimes more, with narrowly linear grayish leaves; legumes to 6" long, grayish with purplish stripes. Sheep are fond of the pods for food.

ACACIA LONGIFOLIA var. SOPHORAE (Labill.) F. Muell.
255668 (S-230) Spreading or sometimes erect tree to 15' high; branches sometimes pendulous; flowers bright yellow; leaves yellow-green, dense. Provides a very good ground cover, especially on sand dunes near the coast where it withstands wind-pruning. Donated by Wimmera Forest Nursery, Wail, Victoria.

ACACIA MAIDENII F. Muell.
260066 (S-466) Tree to 50' high; trunk to 1 1/2' in diameter; phyllodes about 4" long, linear-lanceolate, somewhat falicate, dark green; flowers in spikes, 1' long, bright yellow. Good ornamental; grows well in Melbourne. Donated by Royal Botanic Gardens, Melbourne.

ACACIA MERRALLII F. Muell.
255021 (S-53) Sandy degraded lateritic gravels and sands, 100 miles east of Perth, also at Goomalling and Guraldaring, Western Australia. Fusiform gray shrub up to 6' high. Should make a good garden plant.

ACACIA MITCHELII Benth.
256747 (S-465) Heavy soil in northern part of Brisbane Ranges, Victoria. Rather diffuse shrub to 7' high; leaves bipinnate, bright green, leaflets very small; inflorescence globular; flowers pale yellow. Suited to well-drained areas with rainfall of 25" to 35" per annum.
ACACIA MONTANA Benth.

ACACIA MURRAYANA F. Muell.
256547 (S-701) Small tree, often very floriferous. Purchased from G. W. Althofer, Dripstone, New South Wales.

ACACIA MYRTIFOLIA (Sm.) Willd.
255669 (S-456) Spreading shrub about 3' high and 4' across; phyllodes yellow-green, ovate, about 1" long; flowers pale yellow. Symmetrical plant of merit. Requires fairly well-drained conditions and medium soil. Collected in B. Schubert's Garden, Noble Park, Victoria.

256633 (S-196) Diffuse shrub 6' to 8' high and 1' to 3' across; flowers pale yellow. Will grow in light shade. Native of areas with rainfall of 15" to 40" per annum. Donated by Wimmera Forest Nursery, Warr, Victoria.

ACACIA NITIDULA Benth.
256548 (S-654) A low diffuse shrub of granitic soil, Western Australia. Purchased from G. W. Althofer, Dripstone, New South Wales.

ACACIA NOTABILIS F. Muell.
255670 (S-231) Spreading shrub or small tree 4' to 6' high; phyllodes somewhat yellow-green, about 3" to 6" long; flowers large, golden-yellow. Suitable for specimen planting in limestone or sandy areas with a rainfall of 15" to 25" per annum. Donated by Wimmera Forest Nursery, Warr, Victoria.


ACACIA OSWALDII F. Muell.
256190 (S-317) Widespread in dry areas of South Australia. Shrub to 10' high, very variable. Donated by Adelaide Botanic Gardens.

ACACIA PYCNANTHA Benth. (vel aff.)
255671 (S-309) Spreading tree to 15' high and nearly as broad; extremities of branches somewhat pendulous; leaves yellow-green; phyllodes 5" to 8" long and about 1/2" wide; flowers deep yellow, large. Probably best suited to desert and semidesert conditions. Collected in A. E. Lindner's Garden, Vectis South, Victoria.

ACACIA RIGENS A. Cunn.
256089 (S-194) Shrub 2' to 3' high and nearly as broad, densely leafy; phyllodes terete; very floriferous, often making an excellent display in desert areas. Seeds of a low compact form donated by Wimmera Forest Nursery, Warr, Victoria.

256191 (S-318) Needle-bush Wattle. Occurs in mallee scrub, mainly in limestone and sandy soils. Shrub to 4' high, very showy in flower. Donated by Adelaide Botanic Gardens.

ACACIA RUPICOLA F. Muell.
255672 (S-239) Shallow soil in rocky declivities on Mt. Arapiles, Victoria. Somewhat spreading shrub 4' to 6' high, fairly open, with a varnished appearance; phyllodes about 1 inch long; inflorescence globular; flowers bright yellow. Good shrub for specimen planting in dry, rocky places with rainfall of 15" to 25" per annum.

ACACIA SOWDENII Maid.
256192 (S-319) Myall. Native of low rainfall areas of South Australia. Multitrunked tree 15' to 20' high with a round crown. Donated by Adelaide Botanic Gardens.

ACACIA STRICTA (Andr.) Willd.
255673 (S-246) In heavy soil derived from Silurian muds and sandstones, about one-half mile south of Montrose, Dandenong Ranges, Victoria. Erect shrub or sometimes a small spreading tree, usually 4' to 6' high, sometimes to 10' high; phyllodes linear-lanceolate, with a varnished appearance, sometimes yellow-green, usually dark green; flowers pale yellow. Prefers deep loam but tolerates a wide variety of soils.
ACACIA TRINEURA F. Muell.
256634 (S-192) Three-nerved Acacia. Small tree or large shrub 10' to 12' high, 6' to 7' across; foliage sometimes gracefully pendulous; flowers bright yellow. Prefers semidesert conditions. Donated by Wimmera Forest Nursery, Wail, Victoria.

ACACIA ULICIFOLIA (Salisb.) A. B. Court
256640 (S-303) A compact dwarf form of the species with bright green leaves about 1" long, terete or nearly so; flowers pale yellow. Prefers moist rocky places. Donated by A. E. Lindner, Vectis South, Victoria.

ACACIA UNDULIFOLIA A. Cunn. (introduced as var. humilis)
256549 (S-639) Occurs along quartzite ridges over yellow clay, Mullion Creek, 11 miles from Orange, New South Wales. Shrub 4' to 5' high with deep cream-colored flowers. Purchased from G. W. Althofer, Dripstone, New South Wales.

ACACIA VERNICIFLUA A. Cunn.
256092 (S-190) Tree to 15' high; leaves glaucous, graceful, often dense; flowers clear yellow; useful as a specimen tree. An extremely variable species. Donated by Wimmera Forest Nursery, Wail, Victoria.

ACACIA VICTORIAE Benth.
256093 (S-191) Elegant Wattle. Small tree to 12' high; leaves glaucous; flowers pale yellow. Desert species. Donated by Wimmera Forest Nursery, Wail, Victoria.

ACACIA WATTSIANA F. Muell.
256195 (S-321) Southern South Australia to Flinders Ranges. Shrub to 6' high. Donated by Adelaide Botanic Gardens.

ACTINOSTROBUS SP.
256095 (S-235) CUPRESSACEAE. In sand-plain area, near Coorow, Western Australia. Small evergreen coniferous tree or large shrub 10' to 12' high, resembling Cupressus. Thought to be an undescribed species.

ACTINOTUS HELIANTHI Labill.
255022 (S-54) UMBELLIFERAE. Flannel-Flower. Near Sydney, New South Wales. Gray-woolly herb about 2' high, with denticulate leaves; flowers subtended by involucral bracts with the appearance of flannel. A very fine cut-flower. Requires full sun and perfect drainage.

AGONIS JUNIPERINA Schau.
256641 (S-453) MYRTACEAE. Small graceful tree to 20' high; branches spreading and somewhat pendulous toward the extremities; leaves nearly linear; flowers white, small. Suitable for desert and semidesert localities; makes a good specimen plant. Collected in garden of A. E. Lindner, Vectis South, Victoria.

AGONIS MARGINATA Schau.
254928 (S-34) On granite tors often under salt spray in crevices of solid granite, along south coast from Albany to Esperance, Western Australia. Densely branched silvery leaved shrub to 6' high of round habit; flowers numerous, in terminal heads, magenta and white; leaves fusiform, silver-margined. Very showy; should be grown in coastal areas.

AJUGA AUSTRALIS R. Br.
256749 (S-740) LABIATAE. Near Island Bend, New South Wales. Herbaceous perennial to about 8" high; flowers lavender-blue.

260068 (S-383) Soft-hairy perennial, occasionally to 2' high; leaves ovate-oblong, somewhat toothed; flowers bright blue. Thrives under semi-desert conditions. Donated by Royal Botanic Gardens, Melbourne.

ALECTRYSN TAMENTOSUM (F. Muell.) Radlk.
260071 (S-1072) SAPINDACEAE. Tree 20' to 30' high; young branches rusty-tomentose; leaves divided into 4 to 8 leaflets, each 2" to 4" long; flowers small. Donated by Royal Botanic Gardens, Melbourne.

ANGOPHORA COSTATA Britten
256750 (S-516) MYRTACEAE. Material originally from Pymble, New South Wales. Beautiful red-barked tree resembling
some species of Eucalyptus with white flowers produced in profusion. Donated by H. G. Kershaw, St. Ives, New South Wales.

ANGOPHORA SUBVELUTINA F. Muell. 256268 (S-555) Tree 30' to 40' high, irregularly spreading, with rough bark; flowers white, showy; leaves grayish, sessile. Donated by Brisbane Botanic Garden.

ANIGOZANTHOS BICOLOR Endl. 254929 (S-49) AMARYLLIDACEAE, Red and Yellow Paw. Common on clay flats near Kenwick, 10 miles east of Perth, Western Australia. Shorter and less showy than A. manglesii, somewhat intermediate between it and A. humilis. Flowers earlier than A. manglesii and of shorter duration. Vegetative propagation more reliable than seeds.

ANIGOZANTHOS FLAVIDA DC. 255023 (S-55) Low-lying moist areas in peaty sands of silicious character along roadsides at Collie, southwestern Western Australia. A color form with dark red flowers (greenish-yellow flowers are produced in other areas). Seeds germinate freely but clumps of rhizomes may be divided to better advantage in autumn. Easiest of all kangaroo-paws to cultivate.

ANIGOZANTHOS HUMILIS Lindl. 256631 (S-236) Yellow Cat's-Paw. In white sand in association with Byblis gigantea, 1 mile north of Moora, Western Australia. Perennial herb to 12" high; flowers clear yellow (the typical phase has pink and yellow flowers).

ANIGOZANTHOS MANGLESII D. Don 254930 (S-50) Flowers bright red and green to 3" long; plants about 3' high; leaves irislike with blackish margins. Requires moist locations in full sun during the growing season, but dry when dormant.

ANTHOCERCIS FRONDOSA (Miers) J. M. Black 256643 (S-304) SOLANACEAE. In deep sandy soil along Mt. Zero-Halls Gap road, Grampians, Victoria. Erect tree or small shrub, 4' to 8' high; leaves light green; flowers white. Good ornamental; thrives with rainfall of 20" to 35" per annum.

ARGANIA SPINOSA (L.) Skeels 256197 (S-337) SAPOTACEAE. Argan Tree. A tree to 20' high, suitable for very dry areas. Donated by Adelaide Botanic Gardens.

ASTARTEA FASCULARIS DC. 256670 (S-324) MYRTACEAE. Native of Western Australia. Shrub to about 6' high with small white flowers. Donated by Adelaide Botanic Gardens.

ATRIPLEX VESICARIA Heward 256200 (S-394) CHENOPODIACEAE. Bladder Saltbush. Native of drier parts of southern Australia. Shrub to about 2' high. Donated by Adelaide Botanic Gardens.

B

BACKHOUSIA ANUGSTIFOLIA F. Muell. 256672 (S-327) MYRTACEAE. Evergreen tree 15' to 20' high. Donated by Adelaide Botanic Gardens.

BANKSIA ASHYBY E. G. Bak. 254932 (S-42) PROTEACEAE. Ashby's Banksia. In heavy sand-plain soils and in loose gritty sands, 15 miles northwest of Ajana on Murchison River road, Western Australia. Shrub or small tree, 8' to 15' high; leaves long, glaucous, deeply and regularly serrate; flowers rich orange, in spikes, very showy. Withstands exposure to sun and wind; should thrive on coastal sands in areas with low rainfall.

255024 (S-165) Ajana, Western Australia. Purchased from R. W. Johnson, of Johnson & Co., seed merchant.

BANKSIA BURDETTII Bak. f. 255025 (S-166) Burdett's Banksia. In sterile sandy soil. Shrub 6' to 10' high with spreading branches; flowers orange-yellow, in cone-like spikes, 3" to 6" long. Purchased from R. W. Johnson of Johnson & Co., seed merchant.
BANKSIA COLLINA R. Br.
256096 (S-214) Hillside Banksia. Grows in low damp area in light shade, Labertouche, Victoria. Upright densely branched shrub 8' to 10' high, sometimes higher; flowers yellowish in cylindrical conelike heads, 6' to 8' long.

BANKSIA HOOKERIANA Meissn.
255027 (S-171) In sterile white sand. Shrub 3' to 6' high, widely branched. Leaves bright green, narrow, mostly 3" to 5" long. Flower-cones terminal, orange-yellow. One of the handsomest species of the genus. Will not tolerate excessive water in summer. Purchased from R. W. Johnson of Johnson & Co., seed merchant.

BANKSIA INTEGRIFOLIA L. f.
256752 (S-750) Tall shrub or small tree 10' to 12' high. Along road about 10 miles west of Hall's Gap, Grampian Mountains, Victoria.

BANKSIA LARICINA C. A. Gardn.
255028 (S-167) Sandy or peaty soil, wet or moist in winter. Shrub 2' to 4' high with crowded green leaves about 1" long; flowers yellow in subglobose spikes 1" to 2" in diameter; mature flower-cones 3" in diameter, 3" long, with beautifully colored, large, petaloid capsules. Purchased from R. W. Johnson of Johnson & Co., seed merchant.

BANKSIA LINDLEYANA Meissn.
254933 (S-35) Semi-arid area with 15 inches of winter rainfall, north of Wubin near Mullewa Road, Western Australia. Shrub to 8' high; flowers golden-yellow; leaves narrow, deeply serrate. One of the best species for dry climates.

BANKSIA SCEPTRUM Meissn.
255029 (S-170) In sterile white or yellow sand; shrub 4' to 8' high, erect, densely branched; leaves small, resembling a small-leaved Quercus; flower-spikes large, golden-yellow, to 9" long, terminal. Purchased from R. W. Johnson of Johnson & Co., seed merchant.

BANKSIA SPECIOSA R. Br.
255030 (S-187) In sterile white sand near Esperance, Western Australia. Shrub 15' to 20' high, densely branched and leafy; flower-cones oblong; flowers pale yellow. Collected by N. Gayfer.

BANKSIA SPHAEROCARPA R. Br. (vel aff.)
255031 (S-169) In sterile sandy soil or pure sand. Habit and foliage pinelike, 2' to 3' high; flowers lemon-yellow, in cylindrical spikes. Summer-flowering. Purchased from R. W. Johnson, of Johnson & Co., seed merchant.

BARKLYA SYRINGIFOLIA F. Muell.
256269 (S-598) LEGUMINOSEAE. Slow-growing tree to 40' high with bright yellow flowers and glossy green foliage. Donated by Brisbane Botanic Gardens.

BAUERA RUBIOIDES Andrews
254745 (S-257) SAXIFRAGACEAE. Diffuse spreading shrub 6' to 8' high, sometimes a scrambler in shaded locations; flowers rose-red, pendulous, on long pedicels. Good ornamental; responds to pruning. Grows well in sandy soil. Collected in Schubert's Nursery, Noble Park, Victoria.

BAUERA SESSIIFLORA F. Muell.
254746 (S-256) ERECT or sometimes spreading shrub usually 4' to 5' or sometimes to 8' high; leaves soft, whorled; flowers rose-pink, pendulous. Very showy; responds to pruning. Grows well in sandy soil. Collected in Schubert's Nursery, Noble Park, Victoria.

BAUHINIA CUNNINGHAMII Benth.
256270 (S-584) LEGUMINOSAE. Collected in Northern Territory by W. G. Trapnell, Brisbane Botanic Garden.

BAUHINIA HOOKERI F. Muell.
256271 (S-578) Spreading tree to 20' high; petals white; stamens and pistil red. Donated by Brisbane Botanic Garden.

BEYERIA OPACA F. Muell.
256644 (S-222) EUPHORBIACEAE. Viscid, mostly erect shrub 4' to 6' high; leaves mostly under 1" long; flowers small, white or creamy-yellow. A good specimen shrub; prefers desert or semi-desert conditions with a rainfall of 15" to 30" per annum and sandy or gravelly soil. Donated by Wimmera Forest Nursery, Wall, Victoria.
BILLARDIERA SCANDENS J. E. Sm.
256272 (S-533) PITTOSPORACEAE. Northwestern slopes of Dandenong Ranges, along highway between Montrose and Kalorama, Victoria. Evergreen twining vine to 6' or more long, with blue flowers.

BORONIA CYMOSA Engl.
255032 (S-164) RUTACEAE. Granite Boronia. In very hard dry gravel in full sun on railroad embankment along Mullewa Road, 36 miles east of Geraldton, Western Australia. Suffruticose shrub about 1' high, somewhat spreading, 1' to 2' across; flowers soft pink to deep rose-pink and pure white.

BORONIA MEGASTIGMA Nees
254949 (S-128) In swampy areas, vicinity of Albany, Western Australia. A heathlike shrub 2' to 3' high; flowers bell-shaped, about one-quarter inch in diameter, brown outside, lemon-yellow inside, extremely fragrant, used in perfume manufacture and said to have lasting fragrance. Requires well-drained soil that never dries out.

BORONIA PURDIEANA Diels
254950 (S-132) Lemon-scented Yellow Boronia. In predominantly sandy soils, Wanneroo, Western Australia. Slender shrub, 1 1/2' to 3' high; flowers lemon-yellow, tinged green at base, becoming brownish with age, highly scented. A good cut-flower.

BOSSIAEA HETEROPHYLLA Vent.
256554 (S-704) LEGUMINOSAE. Sandstone ridges, Turramurra, New South Wales. Shrub, 2' to 3' high with flattened stems; flowers brown and yellow. Purchased from G. W. Althofer, Dripstone, New South Wales.

BRACHYCOME SCAPIGERA (Sieb. & Spreng.) DC.
256754 (S-735) Swampy ground, Rennix Gap, Mt. Kosciusko, New South Wales. Herb; flower-heads large with white rays.

BRACHYCOME SIEBERI DC.
256755 (S-730) Mt. Franklin Road, Australian Capital Territory. Perennial herb with rosettes of leaves at base; flowering stems about 12" long; flower-heads about 1" in diameter; ray florets lavender.

BRUNONIA AUSTRALIS J. E. Sm.
256273 (S-529) BRUNONIACEAE. Goonoowari Forest, 16 miles from Dubbo, New South Wales. Perennial herb with a rosette of leaves at the base; flower-scapes about 1' long with heads of blue flowers about 1" across. Color variation of the flowers from light to dark blue occurs not within one colony but rather from locality to locality.

BULBINE BULBOSA (R. Br.) Haw.
258499 (6345) LILIACEAE. In snowgum forest, Blackfellow's Gap, New South Wales.

BURSARIA SPINOSA Cav.
256679 (S-408) PITTOSPORACEAE. Native Box. Throughout Australia. A shrub to small tree; flowers small, white, in large panicles; midsummer. Donated by Adelaide Botanic Gardens.

BYBLIS GIANTEA Lindl.
255034 (S-189) BYBLIDACEAE. In sandy clay soil, Cannington, Western Australia. An insectiferous plant with linear leaves in rosettes; leaves to 12" long, covered with viscid glands; flowers rose-purple, about 1" in diameter on spikes 1 1/2' to 2' long. Collected by D. M. Churchill.

CALLISTEMON SP. (introduced as C. aemulum)
256512 (S-474) MYRTACEAE. Shrub to 8' high; from garden of Miss Alison Ashby, Blackwood, South Australia. Donated by Adelaide Botanic Gardens.
CALLISTEMON ACUMINATUS Cheel
256203 (S-381) Temperate areas of eastern Australian states. Tall shrub with bright red bottlebrushes. Donated by Adelaide Botanic Gardens.

CALLISTEMON BRACHYANDRUS Lindl.
256204 (S-382) Native of South Australia, Victoria, and New South Wales. Tall shrub with drooping branches and small red to golden-yellow bottlebrushes. Donated by Adelaide Botanic Gardens.

CALLISTEMON LINEARIS DC.
256205 (S-383) Large shrub with linear leaves and large bright red bottlebrushes. Donated by Adelaide Botanic Gardens.

CALLISTEMON MACROPUNCTATUS (DuM., Cours) A. B. Court
256645 (S-240) Erect or spreading shrub 5' to 10' high; leaves rigid, 1 1/2" to 3" long, pungent-tipped; flowers in clusters or spikes along the stems, bright red or crimson. A good semidesert ornamental. From garden of A. E. Lind- ner, Vectors South, Victoria.

CALLISTEMON PACHYPHYLLUS Cheel
255036 (S-186) Shrub 6' to 8' high. From garden of Dr. Stanley Blake, Brisbane, Queensland.
255680 (S-500) Shrub 8' to 10' high with showy, large red bottlebrushes. From garden of Miss Alison Ashby, Blackwood, South Australia.

CALLISTEMON PACHYPHYLLUS Cheel
(introduced as var. viridis)
256438 (S-625) Flowers green, otherwise like the species. Donated by Brisbane Botanic Garden.

CALLISTEMON PHOENICEUS Lindl.
254952 (S-146) Greenhead Road, 15 miles west of Coorow, Western Australia. Shrub 3' to 5' high, rarely larger; leaves glaucous, narrow; flowers crimson, in large erect spikes. Prefers loam but will grow in sand under wet or dry conditions. Purchased from R. W. Johnson of Johnson & Co., seed merchant.
255681 (S-446) Shrub 8' to 10' high with brilliant red bottlebrushes. From garden of Miss Alison Ashby, Blackwood, South Australia.

CALLISTEMON PINIFOLIUS DC. (introduced as var. viridiflora)
256555 (S-710) From nursery of G. W. Althofer, Dripstone, New South Wales.

CALLISTEMON RUGULOSUS DC.
256206 (S-384) Scarlet Bottlebrush. Native of southern areas of South Australia to Flanders Ranges. Large shrub with pink or red bottlebrushes. Donated by Adelaide Botanic Gardens.

CALLISTEMON SALIGNUS var. AUSTRALIS Benth.
256680 (S-385) Shrub with large white bottlebrushes. Donated by Adelaide Botanic Gardens.

CALLISTEMON SIEBERI DC.

CALLISTEMON SPECIOSUS DC.
255035 (S-184) Very abundant in swampy places along Albany to Denmark highway, Western Australia. Low shrub 3' to 4' high with lanceolate leaves; inflorescences resemble a bottlebrush 6" to 8" long, brilliant red. The common name "bottlebrush" refers to the various species of the genus.

CALLISTEMON TERTIFOLIUS F. Muell.
256207 (S-386) Flinders Ranges, South Australia. Shrub to 5' high with terete leaves and bright red bottlebrushes. Donated by Adelaide Botanic Gardens.

CALLITRIS CUPRESSIFORMIS Vent.
256275 (S-551) CUPRESSACEAE. Conical evergreen tree to 40' high. Donated by Brisbane Botanic Garden.

CALOTHAMNUS BLEPHAROSPERMUS F. Muell.
254953 (S-147) MYRTACEAE. In slightly loamy yellow sand or granitic soils, Mullewa, Western Australia. Shrub 3' to 5' high; flowers with long bundles of bright red stamens; fruit cylindrical, verrucose. Purchased from R. W. Johnson of Johnson & Co., seed merchant.

256097 (S-248) Sandy areas near Geraldton, Western Australia. Erect fanshaped shrub, to 5' tall with the aspect of
Callistemon; flower-spikes red on leafless old wood. Donated by Nigel Quick, 5 Tintern Road, Toorak, Victoria.

**CALOTHAMNUS CHRYSANTHERUS** F. Muell.

255037 (S-56) Net-Bush. In light lateritic soils and yellowish sands over deep pisolithic gravels, Billericay, 22 miles north of Kondinin, Western Australia. Erect shrub to 5' high; leaves long, terete; flowers rich red and yellow. Fine free-flowering shrub.

**CALOTHAMNUS GILESII** F. Muell.

255085 (S-466) An erect shrub 4' to 5' high, and 2" to 3" across; leaves terete or nearly so, 4" to 5" long; flowers red. From garden of A. E. Lindner, Vectis South, Victoria.

**CALOTHAMNUS HOMALOPHYLLUS** F. Muell.

255038 (S-57) At Binnix, 45 miles north of Geraldton, Western Australia. Shrub to 8' high related to *C. quadrifidus* with more brilliant crimson flowers and broader glabrous leaves. An easy plant to grow.

**CALOTHAMNUS LONGISSIMUS** F. Muell.

255039 (S-58) Long-leafed Net-Bush. Sandy gravelly soils, southwest of Three Spring enroute to Jurien Bay and Denver Hill. Shrub about 4' high; leaves long, wavy, terete; flowers dark red, borne among the leaves. Curiously interesting shrub.

**CALOTHAMNUS SANGUINEUS** Labill. (vel aff.)

255041 (S-179) Net-Bush. Mullewa Road, 30 miles east of Geraldton, Western Australia. Shrub 4' or sometimes more high; flowers radial on the stems. The common species of the area. Donated by Mr. Muir of Geraldton.

**CALOTHAMNUS SCHAUERI** Lehm.

256646 (S-293) Erect, densely branched or spreading shrub 3' to 5' high; leaves terete, 4" to 8" long; flowers blood-red. Suited to areas with 15" to 20" rainfall per annum. From garden of A. E. Lindner, Vectis South, Victoria.

**CALYTHRIX SP.**

255047 (S-156) MYRTACEAE. In pure sand along Mullewa Road, about 30 miles east of Geraldton, Western Australia. Small shrub to 18" high with minute rather succulent leaves and pink, star-shaped flowers.

**CALYTHRIX DEPRESSA** Turcz.

256556 (S-634) Watheroo, Western Australia. Shrub or subshrub to 3' high; flowers cream with a deep yellow center. Purchased from G. W. Althofer, Dripstone, New South Wales.

**CALYTHRIX TETRAGONA** Labill.

256600 (S-480) Along roadside in poor soil, 90-Mile Desert near Coonalpyn, South Australia. Small shrub to 3' high with small needlelike leaves; flowers star-shaped, white to pink, in dense heads.

**CARMICHAELIA WILLIAMSI** T. Kirk

256210 (S-389) LEGUMINOSAE. Shrub to 4' tall with compressed branches; flowers yellow. Donated by Adelaide Botanic Gardens.

**CASSIA EREMOPHILA** A. Cunn.

255048 (S-157) LEGUMINOSAE. Desert Cassia. From the "Little Desert" near Kiata, Victoria. Shrub to 6' tall with finely divided leaves, resembling *C. artemisioides* but with green not gray leaves; flowers yellow, showy. Donated by Miss A. Jordan, Kiata, Victoria.

**CASSIA STURTII** R. Br.

255049 (S-158) Dense Cassia. From the "Little Desert" near Kiata, Victoria. Resembles *C. artemisioides* but more compact with gray leaves. Donated by Miss A. Jordan, Kiata, Victoria.

**CASAUINA DISTYLA** Vent.

254668 CASAUINACEAE. Mt. Arrowsmith, Tasmania. Donated by C.S.I.R.O., Tasmanian Regional Laboratory, Hobart, Tasmania.

256601 (S-49) 90-Mile Desert, near Coonalpyn, South Australia. Small shrub to 8' high. New growth with attractive copper color.
256647 (S-217) Spreading shrub, 6' to 8' high and as broad with graceful usually pendulous branches and branchlets, somewhat slate-colored. Good for specimen planting and for hedges, preferably in sandy soil in areas with 15" to 20" rainfall per annum.

CASUARINA EQUISETIFOLIA L.
256757 (S-696) Near Southport, Queensland. Tree usually to about 20' high with attractive dark green foliage.

CASUARINA TORULOSA Ait.
256758 (S-695) Road from Beechmont to Binna Burra, Queensland. Tree to 20' high; very attractive.

CEPHALOTUS FOLLICULARIS Labill.
251283 (S-3) CEPHALOTACEAE. Albany Pitcher Plant. Albany to Denmark road, 21/2 miles west of Mt. Barker junction, Western Australia. Leaves a few inches long, forming a rosette at the base, some of which are modified to form small urn-shaped pitchers 1" to 1 1/2" high and nearly as wide; pitchers green, the lip with reddish-brown ribs, the lid with reddish-brown stripes; flowers white, small, borne on a scape, 12" to 15" long. Inhabits nearly pure peat soil above the level of standing water in association with sedge tussocks.

CHORIZEMA CORDATA Lindl.
256211 (S-411) LEGUMINOSAE. Flame Pea. Small shrub with broad leaves and showy orange flowers. Donated by Adelaide Botanic Gardens.

CHORIZEMA DICKSONII R. Grah.
256559 (S-669) In lateritic soils, Western Australia. Shrub to 3' high; flowers red. Purchased from G. W. Althofer, Dripstone, New South Wales.

CLEMATIS ARISTATA R. Br.
255050 (S-177) RANUNCULACEAE. In pure sand along coastal dunes, 10 miles south of Geraldton, Western Australia. Scrambling vine over other shrubs with decorative plumose seed heads. Flowers not seen.

CLEMATIS GLYCINOIDES DC.
256279 (S-514) Pymble, New South Wales. Woody evergreen climber; flowers white. Donated by H. G. Kershaw, St. Ives, New South Wales.

CONOSPERMUM CRASSINERVIUM Meisn. 254956 (S-154) PROTEACEAE. In sterile sandy soil, 42 miles north of Perth along the Great Northern Highway. Shrub; leaves all radical; flowers produced on scapes 4' to 6' high in broad corymbs of woolly-white flower-heads, the perianth segments deep violet. Seed may be extracted only by hand. Needs heat treatment for germination. Purchased from R. W. Johnson of Johnson & Co., seed merchant.

CONOSPERMUM GLUMACEUM Lindl.
254957 (S-134) Bullsbrook, Western Australia. Shrub 4' to 5' high, often less, with loosely flaky-fibrous, dark-colored bark; stems slender, erect, sparsely branched, densely leafy; leaves linear; flowers in elongate, spreading or drooping spikes with closely imbricate, narrow glumelike yellowish-white bracts that cover the small yellowish-white flowers. A cover of light straw over the seedbeds is often burned in Australia as a means of releasing the seeds from the woody seed-head.

CORREA BAUERLENI F. Muell.
255628 (S-460) RUTACEAE. Spreading shrub to 8' high and nearly as much across; leaves ovate, dark glossy green, glandular-dotted; flowers greenish-white, pendulous, about 1" to 1 1/2' long. Fine foliage species for areas with relatively light soils and rainfall of 25" to 40" per annum. Donated by Royal Botanic Gardens, Melbourne.

CORREA DECUMBENS F. Muell.
254756 (S-254) Low compact shrub about 2' high with nearly prostrate or spreading branches, 2' to 3' across; flowers dull red, tipped with green; stamens bright yellow and green. Responds to pruning. From Schubert's Nursery, Noble Park, Victoria where it is grown in deep sandy soil.

CORREA TURNBULLII E. Ashby 254757 (S-252) Erect or semi-erect shrub to 5' high and 3' to 4' across; flowers red and green, pendulous. Makes a good specimen plant. From Schubert's
Nursery, Noble Park, Victoria, where it is grown in deep sandy soil.

CRASPEDIA UNIFLORA Forst. f. 256759 (S-751) COMPOSITAE. Mt. Franklin Road, Australian Capital Territory. Perennial herb with a basal rosette of glaucous leaves; flower-heads on stems 12" to 15" long, the rays yellow.

CROWEA EXALATA F. Muell. 254758 (S-253) RUTACEAE. Spreading shrub to 3' high, 4' to 5' across; flowers deep pink, waxy. Ornamental prized for the combination of beautiful flowers and fine foliage. From Schubert's Nursery, Noble Park, Victoria where it is grown in deep sandy soil.

D

DAVIESIA CORDATA J. E. Sm. 256561 (S-668) LEGUMINOSAE. In a sheltered forest, Lesmurdie, Western Australia. Shrub to 6' high. Purchased from G. W. Althofer, Dripstone, New South Wales.

DIANELLA TASMANICA Hook. f. 258502 LILIACEAE. Junction of Wark's Road, Australian Capital Territory.

DILLWYNIA ERICIFOLIA J. E. Sm. 256283 (S-515) LEGUMINOSAE. Pymble, New South Wales. Erect, heathlike shrub to 4' high; flowers yellow, papillose, borne in clusters. Donated by H. G. Kershaw, St. Ives, New South Wales.

DODONAEA ADENTHOPHORA Miq. 255055 (S-67) SAPINDACEAE. Hop-Bush. Light sandy loam, Coolgardie to Narembeen, south to Billericay, Western Australia. Small rather twiggy shrub, mostly upright to columnar with finely pinnate leaves; fruiting heads scarlet, with a hoplike appearance.

DODONAEA MICROZYGA F. Muell. 255056 (S-68) In shallow granitic soil, summit of Fraser Range, Western Australia. Shrub to 3' high with pinnate leaves and very showy fruit. A handsome tractable shrub for a dry climate in basic clay soils.

DORYANTHES EXCELSA Correa 256760 (S-532) AMARYLLIDACEAE. Near Pymble, New South Wales. Leaves radical, forming a dense rosette, about 4' long, strap-shaped; flower stalks 10' to 12' long with globular flower-heads 12" to 15" in diameter, red. Donated by H. G. Kershaw, St. Ives, New South Wales.

DRYANDRA PRAEMORSA Meissn. 255059 (S-69) PROTEACEAE. Holly Dryandra. In Darling ranges and in coastal sands within a radius of 25 miles of Perth, Western Australia. Tree to 18' high with oaklike leaves; flowers yellow in heads 2" in diameter.

DRYANDRA SPECIOSA Meissn. 255060 (S-70) Showy-Dryandra. In deep sandy loam, 15 miles east of Perth, in Tammin Reserve, Western Australia. Shrub 4' to 5' high of globular habit; leaves dark green, narrowly linear, entire, 3" to 5" long; flowers white semipendulous. Seedlings apparently tolerate a basic soil.

E

EREMAEA SP. 253062 (S-71) MYRTACEAE. On coastal sand-plain, at Bandinggorra, 125 miles north of Perth, Western Australia. Heathlike shrub to 5' high; leaves short; flowers orange. Eremaeas resent poorly drained soils.

EREMAEA ACUTIFOLIA F. Muell. 256764 (S-497) Small shrub resembling Melaleuca with small heads of orange flowers. From garden of F. C. Payne, Athelstone, South Australia.

EREMAEA BEAUFORTIOIDES Benth. 255694 (S-448) Shrub about 5' high with heads of showy bright orange flowers. From garden of F. C. Payne, Athelstone, South Australia.

ERYNGIUM ROSTRATUM Cav. 256562 (S-671) UMBELLIFERAE. In clay soil, Molong, New South Wales. Herbaceous to 1' high; flowers blue in heads subtended by spiny bracts.
EUCALYPTUS ALPINA Lindl.
256099 (S-203) MYRTACEAE. Mirranataw Gap, Grampian Mountains, Victoria. Shrub to 20' high; flowers yellow; leaves bright green. A bushy shrub useful for a windbreak in arid regions; prefers slightly acid light soil. Seed maintains viability over several years, donated by Wimmera Forest Nursery, Wail, Victoria.

256214 (S-339) Grampian Mountains, Victoria. Straggly tree to 15' high with white flowers. Donated by Adelaide Botanic Gardens.

EUCALYPTUS ANGULOSA Schau.
255696 (S-478) Near Coonalpyn, South Australia. A mallee species 6' to 15' high with whitish stems and rather coarse, dark green leaves; flowers white.

EUCALYPTUS BAXTERI (Benth.) Maid & Blakely
255697 (S-485) Near Coonalpyn, South Australia. A mallee species 10' to 15' high with stringy bark; flowers white.

EUCALYPTUS BICOLOR A. Cunn.
254996 (S-15) Black Box. Along banks of Murray River at Loxton, South Australia. Rather broad-headed tree to 40' tall with grayish leaves. Said to be tolerant of saline soils.

EUCALYPTUS BLOXOMII Maid.
256563 (S-744) Native of southwestern Queensland. Tree to 40' tall. Purchased from G. W. Althofer, Dripstone, New South Wales.

EUCALYPTUS BURRACOPPINENSIS Maid. & Blakely
255063 (S-72) Burracoppin Mallee. Occurs around Burracoppin and west as far as Kellerberrin, Western Australia. A small tree or shrub 8' to 15' high, with smooth gray bark on the branches and with ragged bark on the lower part of trunk; flowers yellowish white, very showy. Widely used in Western Australia by Forest Department, otherwise little known in cultivation.

EUCALYPTUS CALYCOGONA Turcz.
256215 (S-340) Native of southern and Western Australia. A mallee species, 15' to 20' high; a pink-flowered form. Donated by Adelaide Botanic Gardens.

EUCALYPTUS CAMPASPE Moore
255064 (S-73) Silver-topped Gimlet. Mainly on limestone ridges, Coolgardie to Norseman and east for 20 miles. Mallee species 25' to 30' high with a fluted trunk and smooth ruby-red underbark; flowers yellow. An attractive and easily cultivated, fairly fast grower for calcareous soils in an area of low rainfall (13" per annum in native habitat).

EUCALYPTUS CODONOCARPA Blakely & McKie

EUCALYPTUS CONCINNA Maid. & Blakely
256685 (S-341) Ooldea, South Australia to Western Australia. A mallee species to 10' high. Donated by Adelaide Botanic Gardens.

EUCALYPTUS DIVES Schau.
255644 (S-682) Broad-leaved Peppermint. Tree to 50' high. Donated by Royal Botanic Gardens, Sydney.

EUCALYPTUS DREPanOPHYLLa F. Muell.
256686 (S-507) Bowen Ironbark. Tree 30' to 100' high of graceful habit. Donated by Adelaide Botanic Gardens.

EUCALYPTUS EREMOPHILA (Diels) Maiden
256100 (S-207) Tree to 20' high, bushy of habit; flowers yellowish. Grows on heavy soils. Form from garden of G. Hately, Belellen, Victoria. Donated by Wimmera Forest Nursery, Wail, Victoria.

EUCALYPTUS ERYTHRONEMA Turcz.
256101 (S-209) Dooen, Victoria. Small tree to 20' high; flowers crimson. A fine color phase growing on heavy Wimmera clay in alkaline soil, will grow also on light soils. Donated by Wimmera Forest Nursery, Wail, Victoria.

EUCALYPTUS ERYTHRONEMA hybrid 'AUGUSTA WONDER'
256222 (S-346) A natural hybrid, the second parent unknown, found at Point...
Augusta, South Australia. Tree to 12' high; flowers bright red. Outstanding. Donated by Adelaide Botanic Gardens.

**EUCALYPTUS ERYTHRONEMA hybrid 'URBRAE GEM'**

254995 (S-10) Natural hybrid of E. erythronema, the seed parent, with an unknown second parent. Originated at the Waite Agricultural Institute, Adelaide, South Australia. Tree to 25' high, resembles the seed parent but with larger and more brilliant pinkish-red flowers. At Adelaide, trees of this plant flower for about 10 weeks.

**E U C A L Y P T U S E R Y T H R O N E M A (X) E. STEEDMANII**

256105 (S-213) The F₁ parent plant at Jeparit, Victoria, is bushier than either parent with very showy pink flowers. Seed from the original plant.

**EUCALYPTUS EXIMIA** Schau.

255645 (S-685) Yellow Bloodwood. Tree of medium size. Donated by Royal Botanic Gardens, Sydney.

**EUCALYPTUS FASCICULOSA F. Muell.**

256516 (S-441) Julia Range, South Australia. Large tree 40' to 50' high. Donated by Adelaide Botanic Gardens.

**EUCALYPTUS FORRESTIANA Diels**

255065 (S-74) Forrest's or Fuchsia Gum. Calcareous and gravelly soils, south and southwest of Norseman to Grass Flat or Salmon Gums toward Esperance, Western Australia. A mallee species 10' to 15' high with red flower buds; capsules red. Prefers upland agricultural calcareous loam in well-drained situations, full sun. Perhaps the easiest to grow of the species with showy fruits.

256102 (S-210) Donated by Wimmera Forest Nursery, Wail, Victoria.

**EUCALYPTUS GLOBULUS Labill.**

254671 Breona. Presented by Tasmanian Regional Laboratory, Hobart, Tasmania.

**EUCALYPTUS MACROCARPA Hook.**

254997 (S-21) Rose-of-the-West. One of the showiest of the red-flowered eucalypts; flowers about 2 1/2" across with deep pink filaments and yellow anthers. From Garnet Hately garden near Horsham, Victoria.

**EUCALYPTUS MARGINATA J. E. Sm.**

255066 (S-75) Jarrah. Shubby phase of the species along the coast near Albany and east 75 miles to Cape Riche, Western Australia. Flowers creamy-white produced in profusion; leaves broadly oblanceolate, dark green, lustrous; fruit large. Ornamental species; seedlings dislike transplanting. A timber tree in some parts of the distribution.

**EUCALYPTUS MICROTHECA F. Muell.**

256447 (S-597) Native of Northern Territory. Small tree to 40' high, sometimes of scraggily habit with white bark. Donated by W. G. Trapnell of Brisbane Botanic Garden.

**EUCALYPTUS NIPHOPHILA Maid. & Blakely**

254998 (S-14) Guiini Flat, at about 5,200 feet elevation, Australian Capital Territory. Tree to 20' high of rather twisted habit. One of the most cold-tolerant of all species of Eucalyptus. It might be grown in the United States in areas where no other species of the genus survive.

256761 (S-723) Near Perishes Gap, 5,900 feet elevation, Mt. Kosciusko, New South Wales.

**EUCALYPTUS ORBIFOLIA F. Muell.**

254936 (S-47) Round-leaf Mallee. On granite outcrops, 47 miles north of Southern Cross, Western Australia. Round, glaucous mallee shrub, to 10' high uniformly covered with a grayish bloom; leaves orbicular, glaucous; bark peeling in long strips; flowers lemon-yellow with white anthers. Dislikes alkaline soils.

**EUCALYPTUS OVATA Labill.**

254670 Great Lake, Miena, Tasmania. Donated by C.S.I.R.O., Tasmanian Regional Laboratory, Hobart, Tasmania.

**EUCALYPTUS PAUCIFLORA Sieb.**

254676 Treona, Tasmania. Large-fruited type. Donated by C.S.I.R.O., Tasmanian Regional Laboratory, Hobart, Tasmania.
EUCALYPTUS PERRINIANA F. Muell.  

256762 (S-725) On Road to Guthega, about 5,000' elevation, New South Wales. Small tree to 20' high. Collection from upper altitudinal limit of the species.

EUCALYPTUS PHAEOTRICA Blakely & McKie  
256448 (S-552) Native of southeastern Queensland. Tall tree. Donated by Brisbane Botanic Garden.

EUCALYPTUS PILLEGAENSIS Maid.  
256688 (S-504) Narrow-leaved Box. Slender tree 20' to 50' high with whitish-gray bark. Prefers low flats with fairly heavy alluvial soil. Donated by Adelaide Botanic Gardens.

EUCALYPTUS PLATYPUS Hook.  
256103 (S-206) Bushy multiple-trunked tree to 20' high; flowers lemon-yellow. Makes a good windbreak. Donated by Wimmera Forest Nursery, Wail, Victoria.

EUCALYPTUS PLATYPUS var. HETEROPHYLLA Blakely  
256689 (S-503) Round-leaved Moort. Tree to 30' high; flowers green. Grows in flat areas moist in wet season; plants branch only at top. Donated by Adelaide Botanic Gardens.

EUCALYPTUS PYRIFORMIS Turcz.  
254937 (S-46) Ooldea Mallee or Pear Gum (red-flowered form). Occurs in a belt from Watheroo southeast to Wongan Hills, and north of Lawlers and at Ooldea on eastern side of Nullabor plain, Western Australia. Mallee to 12' high, usually multiple-stemmed; leaves thick; fruit pyriform, pendant, sometimes very large; flowers red. Attractive. Prefers light soils but will grow on clay, requires good drainage. Sow seed in late spring.

EUCALYPTUS PYRIFORMIS 'AUREA'  
256567 (S-706) Flowers yellow. Purchased from G. W. Althofer, Dripstone, New South Wales.

EUCALYPTUS RADIATA Sieb.  
256219 (S-502) Common Peppermint. Tree usually 30' to 50' high, sometimes to 150' high with persistent bark. Prefers light sandy soil. Donated by Adelaide Botanic Gardens.

EUCALYPTUS SIMMONDSII Maid.  
254677 Mt. Arrowsmith, Tasmania. Large-fruited type. Donated by C.S.I.R.O., Tasmanian Regional Laboratory, Hobart Tasmania.


EUCALYPTUS SMITHII R. T. Bak.  
255649 (S-680) Blackbutt Peppermint. Tree to 100' high. Donated by Royal Botanic Gardens, Sydney.

EUCALYPTUS STRICTA Sieb.  
254999 (S-27) In rocky outcrops, Khyber Pass, near Rylestone, New South Wales. Mallee 10' to 15' high; leaves very lustrous, narrowly lanceolate, 3' to 4' long.

EUCALYPTUS SUBCRENULATA Maid. & Blakely  


EUCALYPTUS TASMANICA Blakely  
254674 With ornamental juvenile foliage. Donated by C.S.I.R.O., Tasmanian Regional Laboratory, Hobart, Tasmania.

EUCALYPTUS TETRAPTERA Turcz.  
256104 (S-212) Large coarse shrub to 10' high with very large leaves; fruit large, bright red. From a roadside planting at Greenlake, Victoria.

EUCALYPTUS TORQUATA Leuhm.  
256220 (S-345) Coral Gum. Native of Coolgardie, Western Australia. Tree to 30' high; flowers pink. Donated by Adelaide Botanic Gardens.
EUCALYPTUS TRANSCONTINENTALIS Maid.
256690 (S-344) Flinders Ranges and Eyre Peninsula, South Australia. Tree to 15' high. Variable. Donated by Adelaide Botanic Gardens.

EUCALYPTUS TRIANTHA Link
256221 (S-501) White Mahogany. Large tree to 100' high. Donated by Adelaide Botanic Gardens.

EUCALYPTUS VIRIDIS R. T. Bak.
255650 (S-678) Green Mallee-Box. Small spindly mallee 6' to 30' high. Donated by Royal Botanic Gardens, Sydney.

EUCALYPTUS WOODWARDII Maid.
255068 (S-76) Woodward's Blackbutt. In arid country east of Kalgoorlie, rainfall 9" per annum on deep red sands. Tree to 40' high with glaucous leaves and golden-yellow flowers. Prefers a deep soil, otherwise the plants are dwarfed.

EUCARYA SPICATA (R. Br.) Sprag. & Summ.
256223 (S-338) SANTALACEAE. Drier areas of South Australia. Small tree or shrub to 6' high. Donated by Adelaide Botanic Gardens.

EUSTREPHUS LATIFOLIUS R. Br.
256692 (S-391) LILIAEAE. Wombat Berry. Southern Australia. Climber with small white flowers followed by orange berries. Donated by Adelaide Botanic Gardens.

EUTAXIA MICROPHYLLA J. M. Black
256693 (S-334) LEGUMINOSAE. Widespread in South Australia and Victoria. Small shrub to 3' high with small leaves; flowers papilionaceous, orange and yellow. Donated by Adelaide Botanic Gardens.

EUTAXIA MICROPHYLLA J. M. Black
256694 (S-335) MORACEAE. Native of Queensland. Large tree, resembling F. macrophylla but with smaller leaves. Donated by Adelaide Botanic Gardens.

GAULTHERIA HISPIDA R. Br.
255970 RUTACEAE. Summit of Mt. Wellington, 4,166' elevation, Tasmania. Donated by C.S.I.R.O., Tasmanian Regional Laboratory, Hobart, Tasmania.

GEIJERA MUELLERI Benth.
255632 (S-559) RUTACEAE. Native of Southern Queensland. Small tree to 20' high with small white flowers. A Citrus relative. Donated by Brisbane Botanic Garden.

GELEZNOWIA CALYCINA Benth.
255069 (S-77) RUTACEAE. Yellow Boronia. In yellow sandplains area between Geraldton and Ajana, Western Australia. A small plant about 1' high; leaves pallid, ovate, crowded; flowers yellow, about 1" across, resembling Hibbertia. Attractive. Seeds germinate in response to a pretreatment with boiling water.

255634 (S-646) Dinner Hill, Western Australia. Purchased from G. W. Altofer, Dripstone, New South Wales.

GOSSYPNIUM STURTII F. Muell.

GREVILLEA SP. (Introduced as G. petrophila)
255071 (S-176) PROTEACEAE. Hard granite derived soil with clay, Mullewa Road, 35 miles east of Geraldton, Western Australia. Shrub to 6' high with needlelike leaves; flowers pink; follicles warty and very glutinous.

GREVILLEA SP. (introduced as G. Splendens)
254938 (S-33) On yellow sandplains, Mingenew, Western Australia. Shrub to 7' high; leaves brown above; racemes large, brushlike, terminal; flowers cream-colored, probably the handsomest of grevilleas with flowers this color.

GREVILLEA ASPLENIFOLIA R. Br.
255699 (S-286) Spreading shrub or small tree, to 15' high and as much broad;
leaves linear-lanceolate, to 10" long; flowers pink to red, in simple one-sided racemes about 2" long. Thrives in heavy soil in areas with rainfall of 20" to 35" per annum. From Schubert's Nursery, Noble Park, Victoria.

Grevillea Banksii R. Br. 'ALBA'
256290 (S-520) Shrub to 6' high; flowers creamy-white, and by some thought to be the color represented by the typical phase of the species. From cultivated plants at Pymble, New South Wales; donated by H. G. Kershaw, St. Ives, New South Wales.

Grevillea CRITHMIFOLIA R. Br.
256570 (S-657) Native of Western Australia. Shrub 3' to 5' high; flowers creamy-white. Purchased from G. W. Althofer, Dripstone, New South Wales.

Grevillea ENDLICHERIANA Meissn.
255070 (S-161) In sandy areas along Mullewa Road, 32 miles east of Geraldton, Western Australia. Shrub to 4' high, upright; leaves somewhat silvery, needle-like; flowers pink (white-flowered plants also occur).

Grevillea HELIOSPERMA R. Br.
256453 (S-580) Native of Northern Territory. Tree or large shrub 10' to 12' high; flowers red. Donated by W. G. Trapnell of Brisbane Botanic Garden.

Grevillea ILICIFOLIA R. Br.
255700 (S-450) Chauncey Line, South Australia. Shrub to 6' high with holly-like leaves; flowers red.

Grevillea LINEARIS R. Br.
254764 (S-266) Large spreading shrub to 8' high; flowers pale pink, nearly everblooming; good garden plant without definite soil preferences.

Grevillea MIMOSOIDES R. Br.
256454 (S-564) Native of Northern Territory. Tree to 20' high; leaves acacia-like, simple, lanceolate, falcate, 6" to 10" long, 1/2" to 1" wide; flowers small, pinkish white; pericarp of fruit resinous and easily combustible. Donated by W. G. Trapnell of Brisbane Botanic Garden.

Grevillea PETROPHILOIDES Meissn.
255072 (S-78) Bottlebrush Grevillea. Mt. Sterling, Western Australia. Shrub 4' to 5' high with broomlike leaves which are two or three times ternately or pinnately divided into linear-terete segments; racemes terminal, dense, 1" to 1 1/2" long, plumelike; flowers pink, spring. Seed should be soaked prior to sowing.

Grevillea PUNICEA R. Br.
256571 (S-662) In sandstone areas, Turramurra, New South Wales. Shrub 4' to 5' high; flowers pink. Purchased from G. W. Althofer, Dripstone, New South Wales.

H

Hakea sp.
256768 (S-745) Proteaceae. From garden of Miss Alison Ashby, Blackwood, South Australia.

Hakea AMPLEXICAULIS R. Br.
255079 (S-79) Darling Range from Perth and Toodyay south to Albany on granitic rises. Shrub to 10' high; leaves cordate, stem-clasping, deeply serrate, somewhat rigid and prickly; flowers yellow to pink in leaf axils. Easily grown in cultivation on heavy loam. Attractive.

Hakea BUCCULENTA C. A. Gard.
255080 (S-80) Mullewa, Western Australia; also occurs in yellow sand-plains north of Geraldton to Mingenew-Morawa line. A tall narrow-leaved plant, resembling H. multilineata but with scarlet flowers and with a better habit than the latter. Thrives in semiarid climate.

Hakea CORYMBOSA R. Br.
256527 (S-492) Native of Western Australia. Shrub to 6' high in cultivation with very spiny dense heads of greenish flowers. From garden of Miss Alison Ashby, Blackwood, Victoria.

Hakea CYCLOPTERA R. Br.
256696 (S-348) Eyre Peninsula, South Australia. Prickly shrub to 6' high with small white flowers. Donated by Adelaide Botanic Gardens.
HAKEA DACTYLOIDES (Gaertn.) Cav.
256291 (S-522) Tall shrub with numerous small whitish flowers in axillary clusters. Donated by H. G. Kershaw, St. Ives, New South Wales from cultivated material.

HAKEA ELLIPTICA R. Br.
255081 (S-81) Mt. Clarence Hakea. Occurs chiefly on granitic soils and tors on Mt. Clarence at Albany, Western Australia. Upright shrub to 8' high; flowers white; leaves broadly elliptic, light green, strongly veined, with bronze tips; handsome as a specimen planting in coastal frost-free districts. Easily grown from seed.

HAKEA INCRESSATA R. Br.
255082 (S-82) Widespread from Ravensthorpe to Ajana, Western Australia, and elsewhere in the state except the Mulga country. Shrub to 4' high, spreading; leaves oblong-linear or linear-lanceolate, acute, entire, grayish; fruit globose, about 1" in diameter; flowers brown and cream-colored. Easy to grow.

HAKEA LASIANtha R. Br.
255083 (S-83) On granitic or heavy lateritic moist soils, Albany, Western Australia. Occurs at Manypeaks and Two People Bay on cliffs above the sea. Shrub 6' to 8' tall, densely branched; leaves oblong-lanceolate with a short rigid thick point; flowers white or cream-colored. Grown principally as a foliage plant. Easily grown and suitable for dune reclamation.

HAKEA LISSOCARPHA R. Br.
256655 (S-291) Densely branched shrub 2' to 3' high; flowers pink. Suitable for desert and semidesert areas. From garden of A. E. Lindner, Vectis South, Victoria.

HAKEA MEGALOSPERMA Meissn.
255084 (S-84) In lateritic residual soil exposed to coastal gales, at Mt. Lesueur, 5 miles east of Jurien Bay, Western Australia. Endemic in this locality and now nearly extinct. Low spreading shrub with large, erect, flat fruit 4" long rising above the foliage.

HAKEA MULTILINEATA Meissn.
256106 (S-225) Shrub to 8' high, densely branched of bushy habit; flowers bright rose-pink on racemes 8" long. Outstanding form of the species. Grows in open sandy soil at Wimbera Forest Nursery, Wall, Victoria. Seeds from the latter source.

256574 (S-641) Shrub to 10' high; a broad-leaved green-flowered form. Purchased from G. W. Althofer, Dripstone, New South Wales.

HAKEA PLATYSPERMA Hook.
254939 (S-41) In light soils and sand-plains in calcareous areas, Wongan Hills and Tammin Reserve to Corrigin, northwest to Jurien Bay, Western Australia. Shrub to 8' tall; leaves terete, pungent, about 5" long; flowers brown and cream; fruit nearly globose, about 2" in diameter, very hard; seeds large, flat and disclike.

HAKEA PUGIONIFORMIS Cav.
256224 (S-349) Grampian Mountains, Victoria. Shrub to 5' high, spiny; leaves terete; flowers white. Donated by Adelaide Botanic Gardens.

HAKEA PURPUREA Hook.
256656 (S-226) Rigid shrub to 6' high, nearly glabrous; leaves bright green, terete or nearly so; flowers purple, in sessile or short axillary umbels. Fine ornamental. Prefers desert or semidesert areas and sandy soil.

HAKEA RUSCIFOLIA Labill.
256657 (S-244) Erect shrub to 8' high; leaves rigid, pungent-tipped; flowers white, in dense clusters along upper part of stems. Makes a good specimen plant for gravelly or sandy soils in desert and semidesert areas.

HELICHRYSUM ADENOPHORUM var. WADDALLAE J. H. Willis
258506 (6339) COMPOSITAE. Common along roadside in forested areas, especially in disturbed areas, Cabramurra, New South Wales.

HELICHRYSUM DIOSMAEFOLIUM Sw.
256575 (S-640) Sandy or sandstone ridges in Goonoo Forest, 18 miles from
Dubbo, New South Wales. Shrub 4' to 5' high; flowers white, in corymbs. Purchased from G. W. Althofer, Dripstone, New South Wales.


HELICHRYSUM SEMIPAPPOSUM DC. 258508 (6284) In dry sclerophyllous forest on dry outcrops, Cooma, New South Wales.

HELICHRYSUM STIRLINGII F. Muell. 256770 (S-722) Bendoro to Bullshead, Australian Capital Territory. Diffuse shrub to about 7' high; flowers white.

HELICHRYSUM THYRSOIDEUM (DC.) P. F. Morris & J. H. Willis 256771 (S-733) Lookout between the Creel and Wilson's Valley, Mt. Kosciusko, 4,000 feet elevation, New South Wales. Shrub about 5' high; flowers white, in corymbs.

258509 (6288) In sclerophyllous forest of Eucalyptus dalrympleana, Mt. Kosciusko Road between the Creel and Wilson's Valley, New South Wales.

HELIPTERUM INCANUM var. ALPINUM F. Muell. 258510 (6319) COMPOSITAE. Alpine moor, Mt. Kosciusko, New South Wales. Herbaceous; flower-heads white.

HELIPTERUM ROSEUM Benth. (introduced as var. MACULATUM) 256697 (S-395) Native of Western Australia. Annual to 2' high, with pink flower-heads. One of the "ever-lasting" flowers. Donated by Adelaide Botanic Gardens.

HEMIGENIA SP. 255087 (S-88) LABIATAE. In light sandy loam, north of Wongan Hills, Western Australia. Shrubby to 3' high, very woolly throughout; flowers carmine-pink, in erect spikelike racemes in axils of the leaves.

HETERODENDRON OLEIFOLIA Desf. 256225 (S-396) SAPINDACEAE. Bullock Bush. Drier areas of South Australia. Shrub to 10' high with blue-green leaves; flowers insignificant. Donated by Adelaide Botanic Gardens.

HIBISCUS SP. 255135 (S-173) MALVACEAE. Sandy areas along Geraldton-Mullewa road, Western Australia. Resembles H. wrayae, the small flowered form, but the leaves very glaucous; flowers lavender-blue, about 3' in diameter.

HIBISCUS PANDURAEOFORMIS Burm. f. 256456 (S-554) Native of Northern Territory. Shrub with yellow flowers. Donated by W. G. Trapnell of Brisbane Botanic Garden.

HIBISCUS WRAYAE Lindl. 254969 (S-130) Along Great Northern Highway, 5 miles north of Moora, Western Australia. Shrub to 6' high; leaves deeply lobed, tomentose; flowers light to medium lavender blue, 6' across. Collected by N. Gayfer.

HOVEA SP. 256773 (S-717) LEGUMINOSAE. Bullshead Road, Australian Capital Territory. Shrub 3' to 5' high with mauve flowers.

HOVEA SP. (introduced as H. 'Montana') 258512 (6305) Pipers Gap, New South Wales.

HOVEA ACUTIFOLIA A. Cunn. 256457 (S-611) Shrub to 6' high; flowers deep mauve. Donated by Brisbane Botanic Garden.

HOVEA PUNGENS Benth. 256226 (S-365) Native of Western Australia. Shrub to 3' high; leaves linear-lanceolate, pungent-tipped; flowers papilionaceous, purple-blue; spring. Donated by Adelaide Botanic Gardens.

HOVEA TRISPERMA Benth. 256578 (S-665) Native of Western Australia. Subshrub about 2' high; flowers purple. Purchased from G. W. Althofer, Dripstone, New South Wales.
HYPOCALYMNA ROBUSTUM Endl.  
254970 (S-140) MYRTACEAE. Swan River Myrtle. Sandy loam, Bullsbrook, Western Australia. Shrub, 2' to 3' high; flowers rose-pink. Purchased from R. W. Johnson of Johnson & Co., seed merchant.

ISOPOGON DAWSONII R. T. Bak.  
256774 (S-534) PROTEACEAE. Shrub 4' to 12' high; flowers yellow. From garden of A. E. Lindner, Vectis South Victoria.

ISOPOGON LATIFOLIUS R. Br.  
255090 (S-92) Pink Cone-Bush. Albany to Cape Riche; also on south side Stirling Range, Western Australia. Shrub to 6' high, much-branched; flower-heads rose-pink. Winter-flowering. Fine ornamental.

256295 (S-635) Albany, Western Australia. Purchased from G. W. Althofer, Dripstone, New South Wales.

ISOTOMA PETRAEA F. Muell.  
256701 (S-369) CAMPANULACEAE. Dry areas, usually on rock outcrops, South Australia. Perennial, to 18' high, flowering the first year from seed; flowers pink or mauve. Attractive. Donated by Adelaide Botanic Gardens.

LEPTOSPERMUM CORIACEUM Chees.  
255004 (S-8) MYRTACEAE. Green Tea Tree. From a dry sandy ridge, south of Mildura, Victoria, an area with rainfall of 10" per annum. Small bushy shrub, 4' to 6' high; flowers white.

256300 (S-509) Coonalpyn, South Australia. Shrub up to 5' to 6' high with grayish leaves; flowers white.

LEPTOSPERMUM ERICOIDES A. Rich.  
260111 (756) Spreading tree to 15' high and nearly as wide, usually with several branches arising near the base; leaves small, lustrous green; flowers small, white; fruit a hard capsule. Prefers moist conditions in deep loam.
LEPTOSPERMUM LIVERSIDGEI R. T. Bak.
& H. G. Sm.
256460 (S-540) Shrub to 12' high with erect branches; leaves with a lemon scent when crushed; flowers pink or white. Donated by Brisbane Botanic Garden.

LEPTOSPERMUM LUEHMANNII F. M. Bail.
255006 (S-28) Known only from Glasshouse Mountains, Queensland. Dwarf glabrous tree with smooth reddish-brown bark which is shed in long thin strips; leaves oblong-lanceolate, 1" to 1 1/2" long; flowers white. Specimen about 8' high in garden of Dr. Stanley Blake, Brisbane, Queensland. Seeds obtained from latter source.

LEPTOSPERMUM MYRSINOIDES Schlecht.
256703 (S-371) Widespread in southern South Australia. Small shrub, to 4' high with white or pale flowers in spikes. Donated by Adelaide Botanic Gardens.

LEPTOSPERMUM MYRTIFOLIUM Sieb. ex DC.
258514 (6287) In sclerophyllous forest of Eucalyptus dalrympleana, Mt. Kosciusko road between the Creel and Wilson's Valley, New South Wales.

LEPTOSPERMUM 'NANA'
260109 (S-262) A cultivar of undetermined parentage; very dwarf shrub; excellent ornamental with minute, dense, reddish foliage. Donated by Royal Botanic Gardens, Melbourne.

LEPTOSPERMUM PUBESCENS Lam.
255007 (S-5) Along a stream in Anakie Gorge, southern end of Brisbane Ranges, Victoria. Erect shrub 6' to 7' high; flowers white. Seed from a fine gray-leaved plant.

255008 (S-9) Moonah. In a "salt pan," south of Mildura, Victoria, with rainfall of 10" per annum. Small bushy tree, 8' to 10' high. Should be tried in coastal areas where salt spray is a problem.

255710 (S-228) With larger white flowers than in the typical form. Plants of the typical form may reach to 60' high, although the plant usually attains about 10 feet. Grows well in regions with rainfall of 30" to 45" per annum.

255971 Donated by C.S.I.R.O., Tasmanian Regional Laboratory, Hobart, Tasmania.

LEPTOSPERMUM ROTUNDIFOLIUM Domin
256776 (S-535) Shrub to 12' high; leaves round; flowers creamy-white, about 1" across. Sometimes treated as a variety of L. scoparium.

LEPTOSPERMUM SCOPARIUM Forst.
255972 Donated by C.S.I.R.O., Tasmanian Regional Laboratory, Hobart, Tasmania.

256528 (S-470) Shrub to 10' high with bright pink flowers in dense masses along the stems. From Miss Alison Ashby's garden, Blackwood, South Australia.

LEPTOSPERMUM SCOPARIUM Forst. 'KEATLEY'
260108 (759) Flowers pink, paler toward the edge, 3/4" to 1" across, an excellent winter-flowering form. Donated by Royal Botanic Gardens, Melbourne.

LEPTOSPERMUM SCOPARIUM Forst. 'WALKERI'
260110 (770) Flowers in shades of pink and white; plant with an open spreading habit. Excellent. Donated by Royal Botanic Gardens, Melbourne.

LEPTOSPERMUM SPHAEROCARPUM Cheel
255009 (S-24) Among rocks in Khyber Pass area near Rylestone, New South Wales. Shrub 2' to 3' high with gray leaves; flowers white; small-fruited form.

255093 (S-24a) Same areas as 255001. Large-fruited form.

LEPTOSPERMUM SPINESCENS Endl.
255094 (S-141) Badgingarra, Western Australia. Shrub 1' to 2' high, rigid, with spinescent branches; flowers white with a green center, large for the genus. Purchased from R. W. Johnson of Johnson & Co., seed merchant.
255095 (S-181) Burma Road, 40 miles southeast of Geraldton, Western Australia.

LESCHENAUTIA BILOBA Lindl.
254769 (S-277) GOODENIACEAE. Blue Leschenaultia. Shrubby, 12" to 15" high; sometimes more; flowers pale blue to deep ultramarine. Excellent very floriferous plant, should be tried for border planting and as a ground-cover. Prefers desert or semi-desert conditions.

LESCHENAUTIA EXPansa R. Br.
256581 (S-661) Native of Perth, Western Australia. Subshrub, about 2' high; flowers china-blue. Purchased from G. W. Althofer, Dripstone, New South Wales.

LIVISTONA DECIPiens Becarri
255635 (S-624) PALMAE. Donated by Brisbane Botanic Garden.

LOTUS AUSTRALIS Andrews
256228 (S-372) LEGUMINOSAE. Common in southern Australia. Shrubby perennial, to 3' high with attractive heads of pink or white flowers. Donated by Adelaide Botanic Gardens.

MACROZAMIA MACDONELLIi F. Muell.
256302 (S-631) CYCADACEAE. Donated by Brisbane Botanic Garden.

MARIANTHUS LINEATUS F. Muell.
255097 (S-174) PI T T O S P OR A CEAE. Twining vine in heavy clay and gravel soils, Mullewa Road, about 30 miles east of Geraldton, Western Australia.

MARIANTHUS RINGENS F. Muell.
255098 (S-162) Chapman River Creeper. Along banks of Chapman River near Geraldton, Western Australia. Twining vine over shrubs, with lustrous green leaves; flowers red bell-shaped, pendulous, about 1" long. With pruning, can be grown as an erect shrub. Excellent.

MELALEUCA ACUMINATA F. Muell.
255012 (S-12) MYRTACEAE. In sandy soil between Tailem Bend and Natura, South Australia. Compact shrub 4' to 6' high with small light lavender flowers.

MELALEUCA ANGUSTIFOLIA Gaertn.
256704 (S-425) Donated by Adelaide Botanic Gardens.

MELALEUCA FULGENS R. Br.
255713 (S-426) Shrub to 7' high with red, brushlike filaments and golden anthers. Collected in Payne garden, Athelstone, South Australia.

MELALEUCA GLOMERATA F. Muell.
256304 (S-615) Native of Northern Territory. Shrub to 10' high with white flowers. Donated by W. G. Trapnell of Brisbane Botanical Garden.

MELALEUCA GRAMINEA S. Moore
255099 (S-96) Grass-Leaf Paperbark. In granite tors around Mt. Willyung, near Albany, Western Australia. Shrub, or small tree, 10' to 20' high with white bark; leaves lanceolate, bright green. Heavy loam and clay soils recommended.

MELALEUCA LEUCADENDRON L.
256305 (S-562) Native of Northern Territory. Shrub about 15' high with coarse foliage; flowers light greenish, sometimes red. Donated by W. G. Trapnell, Brisbane Botanic Garden.

256306 (S-582) Maryborough, Queensland. Tree to 20' high, sometimes more.

256706 (S-421) In or along creek beds, Northern Territory. Densely branched tree with a drooping habit, to 30' high with silvery foliage and white papery bark which peels off in layers; flowers white or pale yellow in spikes 3" to 4" long. Donated by Adelaide Botanic Gardens.

MELALEUCA LINARIIFOLIA Sm.
256229 (S-373) Snow-In-Summer, Native of Queensland and New South Wales. Shrub to small tree; leaves linear-lanceolate; flowers white. Midsummer. Donated by Adelaide Botanic Gardens.

MELALEUCA MACRONYCHIA Turcz.
256529 (S-440) Shrub to 10' high with reddish flowers. From garden of Miss Alison Ashby, Blackwood, South Australia.
MELALEUCA MICROPHYLLA Sm.
256707 (S-274) Native of Western Australia. A weeping shrub to 8' high with heathlike leaves and small greenish-yellow bottlebrushlike flower-heads. Donated by Adelaide Botanic Gardens.

MELALEUCA PENTAGONA Labill.
256530 (S-513) Tall shrub to 12' high; flower-heads pink. From garden of Miss Alison Ashby, Blackwood, South Australia.

MELALEUCA PUBESCENS Schau.
255013 (S-13) Tailm Bend to Nauri road, South Australia.

MELALEUCA SCABRA R. Br. (introduced as var. trichophylla)
255101 (S-98) On yellow dunes and sand-plain soil, 10 miles west of Mullewa, Western Australia. Compact shrub about 5' high; flowers crimson in terminal heads, anthers white. Attractive and easy to grow.

MELALEUCA SQUARROSA J. E. Sm.

MELALEUCA STEEDMANII C. A. Gardn.
255015 (S-23) Native of Western Australia. Spreading shrub with brilliant red brushlike flower-heads, anthers golden-yellow. One of the most ornamental species.

255717 (S-475) Shrub to 5' high, with brilliant red brushlike flower-heads. From garden of F. C. Payne, Athelstone, South Australia.

MELALEUCA WILSONII F. Muell.
255718 (S-220) Spreading shrub to 5' high and as broad; flowers mauve or purple borne along the branches. Phase of the species very densely branched. Recommended for heavy or sandy soils with rainfall of 15" to 25" per annum; a hedge plant and for specimen plantings.

MICROMYRTUS HURSTHOUSEI Fitzg.
255105 (S-101) MYRTACEAE. On sands overlying lateritic gravels, Cockleshell Gully. 5 miles east of Jurien Bay, Western Australia. Erect shrub about 3' high; flowers small, white or pink.

MICROMYRTUS HYMENONEMA (F. Muell.) C. A. Gardn.
255106 (S-100) In loose shifting sands, Badgingara and Dinner Hill, Western Australia. Low procumbent subshrub to 6" high, regenerating from layers; leaves heathlike; flowers white, like strings of pearls over the sand. Fine species.

MYOPORUM SERRATUM R. Br.
256710 (S-333) MYOPORACEAE. Shrub to 6' high with glutinous leaves and small white flowers. Useful for coastal planting. Donated by Adelaide Botanic Gardens.

MYROCEPHALUS STUARTII (F. Muell. & Sond.) Benth.
256232 (S-377) COMPOSITAE. Poached-egg Daisy. In sand dunes, Lake Eyre, South Australia. Annual to 2' high; leaves gray-woolly; flower-heads with white rays and yellow disc flowers. One of the everlasting flowers. Donated by Adelaide Botanic Gardens.

N

NOTELAEA LONGIFOLIA Vent.
256711 (S-379) OLEACEAE. Native of eastern states of Australia. Shrub; leaves deep green, lanceolate; flowers small; fruit a large white pearlike drupe. Donated by Adelaide Botanic Gardens.

NOTOXYLINON AUSTRALE Lewton
256467 (S-568) MALVACEAE. Native of Northern Territory. Donated by W. G. Trapnell, Brisbane Botanic Garden.

O

OLEARIA ARGOPHYLLA (Labill.) F. Muell.
256781 (S-713) COMPOSITAE. Along Two-sticks road in Blue Range, Australian Capital Territory. Evergreen shrub, 12' to 15' high; ray-flowers white.

OLEARIA CILIATA F. Muell.
256606 (S-482) 90-Mile Desert near Coonalpyn, South Australia. Subshrub with finely cut leaves; ray-flowers violet, disc florets yellow. Handsome.
OLEARIA ERUBESCENS (DC.) Dippel
256659 (S-298) Rocky declivities just south of summit of Mt. Dandenong, Dan-
denong Ranges, Victoria. Erect, rarely spreading, shrub to 8' high; leaves lus-
trous green, about 2' long; flower-heads large, rays white becoming pink in age. In well-drained soil for areas with rain-
fall of 20" to 45" per annum.

256782 (S-726) Mt. Franklin road, Aus-
tralian Capital Territory. Evergreen shrub, to 3' high with red shoots; ray-
flowers white.

258519 (6290) In Eucalyptus pauciflora forest in open swampy areas, Wilson's
Valley, New South Wales.

OLEARIA FLORIBUNDA Benth.
256588 (S-707) Grampian Mountains, Victoria. Shrub 2' to 3' high; ray-
flowers blue. Donated by G. W. Althofer, Dripstone, New South Wales.

OLEARIA LYRATA Hutch.
256784 (S-724) Blundell's Creek road, Australian Capital Territory. Evergreen shrub 4' to 5' high with white ray-flowers. Will stand frost.

OLEARIA MEGALOPHYLLA F. Muell.
258520 (6294) In Eucalyptus pauciflora forest in open swampy areas, Wilson's
Valley, New South Wales.

OLEARIA PHLOGOPAPPAL (Labill.) DC.
256787 (S-734) Mt. Kosciusko, New South Wales. Shrub to 3' high; ray-
flowers white.

OLEARIA TERETIFOLIA (Sond.) F. Muell.
260808 Donated by William Perry, Ben-
digo, Victoria.

OXYLOBIUM LANCEOLATUM (Vent.)
Druce
260120 (S-536) LEGUMINOSAE. Shrub to 15' high; leaves usually in 3's, linear to linear-lanceolate, 2" to 5" long; flow-
ers in terminal heads or clusters, yellow and red. For a semi-arid climate. Don-
ated by Royal Botanic Gardens, Mel-
bourne.

PELARGONIUM ALCHEMILLOIDES (L.)
L'Herit.
256519 (S-743) GERANIACEAE. In introduced species of South Africa. A rather weedy herb about 2' high; flowers mauve. Donated by Adelaide Botanic Gardens.

PELARGONIUM AUSTRALE Jacq.
256590 (S-709) Tumut Ponds, New South Wales. Herbaceous short-lived peren-
ndl; flowers pinkish-mauve. Plant of coastal dunes. Purchased from G. W.
Althofer, Dripstone, New South Wales.

PERSOONIA JUNIPERINA Labill.
256661 (S-232) PROTEACEAE. Erect or somewhat spreading shrub to 7' high and about 4' broad, with a clear bole 2' to 3' long; leaves bright green, dense, pungent-tipped; flowers small, yellow. Might be useful for a small hedge or as a specimen. Prefers podzolic soils, in areas with rainfall of 20" to 35" per annum.

PETALOSTYLES LABICHOIDES R. Br.
256714 (S-354) LEGUMINOSAE. Creek-
beds in Flinders Ranges, South Aus-
tralia. Shrub, to 6' high with cassialike leaves and orange flowers marked with red. Donated by Adelaide Botanic Gar-
dens.

PETREA VOLUBILIS L.
256311 (S-632) VERBENACEAE. Na-
tive of tropical America. One of the showiest of introduced vines with in-
tense blue flowers. In southern Cali-
ifornia, this plant fails to produce seed. Seed donated by Brisbane Botanic Gar-
dens.

PETROPHILA BILOBA R. Br.
255108 (S-102) PROTEACEAE. Rock Cone-Bush Armadale and Darling Range, near Perth, Western Australia. Some-
times in granitic soils, usually in rocky valleys. Shrub to 10' high; leaves 3-
lobed; flower-cone woolly with yellow flowers; spring. Much grown in Aus-
tralia and perhaps the easiest of the species to grow from seed.
PHEBALIUM GLANDULOSUM Hook.
255595 (S-306) RUTACEAE. Rather diffuse shrub to 3' high; leaves bright green, tuberculate; flowers in small umbels, golden-yellow. Fine plant preferring semidesert and light soil.

PHEBALIUM PUNGENS Benth.
255596 (S-493) Near Coonalpyn, South Australia. Small shrub, 2' to 3' high; the white flowers resemble those of Eriostemon, also of this family.

PIMELEA GLAUCA R. Br.
256607 (S-486) THYMELAEACEAE. Coonalpyn, South Australia. Small shrub to 2' high with heads of white flowers.

POMADERRIS EDGERLEYI Hook. f.
260128 (969) RHAMNACEAE. Small straggly shrub, to 4' high; leaves about 1" long; flowers small in terminal and axillary cymes. Donated by Royal Botanic Gardens, Melbourne.

POMADERRIS FERRUGINEA Sieb.
256717 (S-355) Shrub with rusty-tomentose leaves and large heads of yellowish flowers. Donated by Adelaide Botanic Gardens.

POMADERRIS LANIGERA (Andr.) Sims
260129 (971) Shrub, to 10' high; leaves 1 1/2" to 3" long, broadly elliptic, dull green on upper surface; flowers in a cymose cluster, brownish-white.

POMADERRIS PILIFERA N. A. Wakefield
256472 (S-618) Native of New South Wales, Victoria, and Tasmania. Shrub. Donated by Brisbane Botanic Garden.

PROSTANTHERA BEHRIANA Schlecht.
256793 (S-494) LABIATAE. Shrub, to 6' high with grayish leaves; flowers pale mauve. From garden of F. C. Payne, Athelstone, South Australia.

PROSTANTHERA NIVEA A. Cunn.


PROSTANTHERA ROTUNDIFOLIA R. Br.
256814 (S-528) Mint Bush. Barren rocky hills, 10 miles out on Jones Creek road, near Dubbo, New South Wales. Tall bush to 6' high; flowers mauve. Leaves of this collection are smaller than in the form seen generally in the trade.

PROSTANTHERA STRIATIFLORA F. Muell.
256718 (S-358) Dry rocky areas from South Australia to southern Northern Territory. Shrub to 8' high with masses of white flowers striped purple in the throat. Donated by Adelaide Botanic Gardens.

R

RANUNCULUS MUELLERI Benth.
258524 (6314) RANUNCULACEAE. Alpine moor in wet places, Carruthers Track, Mt. Kosciusko, New South Wales.

RULINGIA PANNELSA R. Br.

S

SCHOLTZIA INVOLUCRATA Druce
255111 (S-105) MYRTACEAE. In peaty sandplain, Dinner Hill south to Cannington and Gonsells area, Western Australia. Shrub to 10' high; flowers nearly white, similar to Thryptomene. Easily grown from cuttings or seed.

SOLANUM AVICULARE Forst. f.
256239 (S-402) SOLANACEAE. Kangaroo Apple. Fairly common in southern Australia. Shrub to 8' high with large purple flowers followed by large orange fruit. Donated by Adelaide Botanic Gardens.
STENOCARPUS SALIGNUS R. Br.  
260136 (954) PROTEACEAE. Tree to 30' high; leaves elliptic to ovate-lanceolate, 2'' to 4'' long, glabrous; flowers in umbels of 10 to 20, creamy-white. A good specimen tree for moist subtropical climate.

H. G. Kershaw, St. Ives, New South Wales.

256318 (S-539) Probable synonym of S. laurifolia. Donated by Brisbane Botanic Garden.

T

TECOMANTHE VENUSTA S. Moore  

256919 Cuttings donated by Adelaide Botanic Gardens.

TEUCRIUM CORYMBOSUM R. Br.  
256725 (S-362) LABIATAE. Dry areas of South Australia. Small shrub with gray leaves and racemes of white flowers. Donated by Adelaide Botanic Gardens.

THOMASIA MACROCARPA Hueg.  
256320 (S-653) STERCULIACEAE. Perth, Western Australia. Shrub to 5' high; flowers pale violet. Purchased from G. W. Althoffer, Dripstone, New South Wales.

THRYPTOMENE AUSTRALIS Endl.  
254941 (S-38) MYRTACEAE. Broom Bush. On yellow sandplain and in light yellow loam, just south of Billaricay, about 20 miles north of Kondinin on railroad to Merredin, Western Australia, an area with rainfall of 14'' per annum. Shrub to 5' high with a broomlike habit; flowers white or pink, borne on the ends
of the branches. Seeds germinate best if sown in autumn.

**THRYPTOMENE HYPOPHYTUS** Turcz.
254775 (S-272) Prostrate shrub 2' to 3' high with pink flowers about 1/4" in diameter; leaves finely divided. Flowers over a period of 5 months. From nursery of B. E. Schubert, Noble Park, Victoria.

254942 (S-37) Low sandplain, 3 miles west of Dinner Hill, Western Australia. Shrub to 3' high with a heathlike aspect; flowers small, resembling those of Erica arborea, but smaller. Recommended for cut-flower. Grows in an arid climate.

**THRYPTOMENE SAXICOLA** Schau.
254776 (S-283) Erect shrub 3" to 4' high; leaves dense, 1/4" long; flowers small, one to three in leaf axils, white to pale rose. From nursery of B. E. Schubert, Noble Park, Victoria.

**THYSANOTUS MULTIFLORUS** R. Br.
256593 (S-670) LILIACEAE. Fringe Lily. Native of Western Australia. Herbaceous, to 18" high with very attractive violet flowers with fringed margins. Purchased from G. W. Althofer, Dripstone, New South Wales.

**TRICHINIA CALOSTACHYUM** F. Muell.
256479 (S-620) AMARANTHACEAE. Native of Northern Territory. Annual herb with purplish-red inflorescence. Donated by W. G. Trapnell, Brisbane Botanic Garden.

**TRICHINIA MANGLESII** Lindl.
255117 (S-110) Railway reserve in light sandy loam overlying gravel, Bendering, Western Australia. Perennial herb about 2' high; flower spikes globular or ovoid, about 2" in diameter, conspicuous for the pink or white tips of the perianth segments protruding from the long white hairs; bracts and bracteoles more or less brown in the center. One of the so-called "everlasting" flowers excellent dried bouquets.

**TURRAEA OBTUSIFOLIA** Hochst.
256321 (S-610) MELIACEAE. Evergreen shrub, to 4' high; flowers small, white. Plants growing in Southern California of this species do not produce seed.

**UNDETERMINED**
256244 (S-352) Morning Iris. Obtained as Orthrosanthus multiflorus Sweet. Native of southern South Australia and Kangaroo Island, South Australia. Irislike plant, up to 18" high with pale blue flowers. Donated by Adelaide Botanic Gardens.

**VERONICA DERWENTIA** Andr.
256729 (S-406) SCROPHULARIACEAE. Southern South Australia. Tall perennial with long spikes of mauve flowers. Donated by Adelaide Botanic Gardens.

258527 Blundell's Creek Road, Australian Capital Territory.

**VERONICA PERFOLIATA** R. Br.
256594 (S-527) Rather sprawly subshrub to 3' high with handsome gray perfoliate leaves; flowers deep violet. From garden of G. W. Althofer, Dripstone, New South Wales.

256769 (S-720) 5-crossings, Australian Capital Territory.

**VERTICORDIA PREISSII** Schau.
255130 (S-113) MYRTACEAE. Yellow Morrison. Occurs widely from Mundagin, northwest to Hill River in gravelly sandy soils, Western Australia. Erect shrub, 1' to 1 1/2' high, of compact habit; flowers golden-yellow.

**XANTHORHOEA MEDIA** R. Br.
256799 (S-708) LILIACEAE. Black Boys. Goonoo Forest, about 16 miles from Dubbo, New South Wales. Plants 3' to 6' high.

**XANTHOSTEMON OPPOSITIFOLIUS** F. M. Bail.
256482 (S-596) MYRTACEAE. Large tree; leaves 2" to 4" long, rather thick.
Wood very durable, indestructible except by fire. Donated by Brisbane Botanic Garden.

XYLOMELUM OCCIDENTALE R. Br.
255133 (S-126) PROTEACEAE. Western Wood Pear. Mainly near the coast on peaty sandplains, Perth south to Busselton, Western Australia. Small tree or large shrub; young leaves hollylike with reticulate veins; flowers white or pink and white; fruit the shape of an inverted pear. Interesting foliage plant. Seedlings dislike transplanting.
<table>
<thead>
<tr>
<th>A</th>
<th>Agonis</th>
<th>Barklya</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acacia</td>
<td>254927</td>
<td>256269</td>
<td>Callistemon</td>
</tr>
<tr>
<td>255019</td>
<td>Ajuga</td>
<td>Bauera</td>
<td>254952</td>
</tr>
<tr>
<td>255020</td>
<td></td>
<td>254745</td>
<td>255035</td>
</tr>
<tr>
<td>255021</td>
<td></td>
<td>254746</td>
<td>255036</td>
</tr>
<tr>
<td>255667</td>
<td>Alectryon</td>
<td>255680</td>
<td>255680</td>
</tr>
<tr>
<td>255668</td>
<td></td>
<td>255681</td>
<td>255681</td>
</tr>
<tr>
<td>255669</td>
<td></td>
<td>Bauhinia</td>
<td>256204</td>
</tr>
<tr>
<td>255670</td>
<td></td>
<td>256205</td>
<td>256205</td>
</tr>
<tr>
<td>255671</td>
<td>Angophora</td>
<td>256206</td>
<td>256206</td>
</tr>
<tr>
<td>255672</td>
<td></td>
<td>256207</td>
<td>256207</td>
</tr>
<tr>
<td>255673</td>
<td></td>
<td>Beyeria</td>
<td>256438</td>
</tr>
<tr>
<td>255674</td>
<td></td>
<td>256512</td>
<td>256512</td>
</tr>
<tr>
<td>256081</td>
<td>Anigozanthos</td>
<td>256645</td>
<td>256645</td>
</tr>
<tr>
<td>256083</td>
<td></td>
<td>256644</td>
<td>256680</td>
</tr>
<tr>
<td>256089</td>
<td></td>
<td>256676</td>
<td>256756</td>
</tr>
<tr>
<td>256092</td>
<td></td>
<td>Billarderia</td>
<td>256756</td>
</tr>
<tr>
<td>256093</td>
<td></td>
<td>256642</td>
<td>256756</td>
</tr>
<tr>
<td>256188</td>
<td></td>
<td>Boronia</td>
<td>256275</td>
</tr>
<tr>
<td>256190</td>
<td>Anthocercis</td>
<td>254949</td>
<td>Calothamnus</td>
</tr>
<tr>
<td>256191</td>
<td></td>
<td>254950</td>
<td>254953</td>
</tr>
<tr>
<td>256195</td>
<td></td>
<td>255032</td>
<td>255037</td>
</tr>
<tr>
<td>256264</td>
<td></td>
<td>Astartea</td>
<td>255038</td>
</tr>
<tr>
<td>256265</td>
<td></td>
<td>Bossiaea</td>
<td>255039</td>
</tr>
<tr>
<td>256430</td>
<td></td>
<td>256554</td>
<td>255041</td>
</tr>
<tr>
<td>256431</td>
<td></td>
<td>256555</td>
<td>255646</td>
</tr>
<tr>
<td>256546</td>
<td>Atriplex</td>
<td>Brachycome</td>
<td>255685</td>
</tr>
<tr>
<td>256547</td>
<td></td>
<td>256568</td>
<td>256097</td>
</tr>
<tr>
<td>256548</td>
<td></td>
<td>255676</td>
<td>Calythrix</td>
</tr>
<tr>
<td>256549</td>
<td></td>
<td>256754</td>
<td>255047</td>
</tr>
<tr>
<td>256630</td>
<td></td>
<td>256755</td>
<td>256556</td>
</tr>
<tr>
<td>256632</td>
<td></td>
<td>258498</td>
<td>256600</td>
</tr>
<tr>
<td>256634</td>
<td>Backhousia</td>
<td>Brunonia</td>
<td>Čarmichaelia</td>
</tr>
<tr>
<td>256637</td>
<td></td>
<td>256273</td>
<td>256210</td>
</tr>
<tr>
<td>256638</td>
<td></td>
<td>Bulbine</td>
<td>Cassia</td>
</tr>
<tr>
<td>256639</td>
<td></td>
<td>258499</td>
<td>255048</td>
</tr>
<tr>
<td>256640</td>
<td>Banksia</td>
<td>Bursaria</td>
<td>255049</td>
</tr>
<tr>
<td>256668</td>
<td></td>
<td>256679</td>
<td>Casuarina</td>
</tr>
<tr>
<td>256747</td>
<td></td>
<td>Byblis</td>
<td>254668</td>
</tr>
<tr>
<td>256748</td>
<td></td>
<td>255034</td>
<td>256647</td>
</tr>
<tr>
<td>260066</td>
<td></td>
<td></td>
<td>256757</td>
</tr>
<tr>
<td>260807</td>
<td></td>
<td></td>
<td>256758</td>
</tr>
<tr>
<td>263752</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actinostrobus</td>
<td>256095</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actinotis</td>
<td>256266</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant Name</td>
<td>Code 1</td>
<td>Code 2</td>
<td>Code 3</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Cephalotus</td>
<td>251283</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dryandra</td>
<td>255059</td>
<td>255060</td>
<td></td>
</tr>
<tr>
<td>Eucalyptus</td>
<td>256219</td>
<td>256220</td>
<td>256221</td>
</tr>
<tr>
<td>Grevillea</td>
<td>254764</td>
<td>254938</td>
<td>255070</td>
</tr>
<tr>
<td>Chorizema</td>
<td>256211</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Clematis</td>
<td>255050</td>
<td>255062</td>
<td>255694</td>
</tr>
<tr>
<td>Eremaea</td>
<td>255070</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conospermum</td>
<td>254956</td>
<td>254957</td>
<td>256562</td>
</tr>
<tr>
<td>Eryngium</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correa</td>
<td>254756</td>
<td>254757</td>
<td>255628</td>
</tr>
<tr>
<td>Eucalyptus</td>
<td>254670</td>
<td>254671</td>
<td>254672</td>
</tr>
<tr>
<td>Hakea</td>
<td>256223</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Craspedia</td>
<td>256759</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eutaxia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crowea</td>
<td>254758</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eustaelpus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crowea</td>
<td>254758</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eutaelpus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daviesia</td>
<td>256561</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eucarya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dillwynia</td>
<td>256561</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaultheria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dodonaea</td>
<td>256283</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geijera</td>
<td>255697</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doryanthes</td>
<td>256760</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gossypium</td>
<td>256240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Euryale</td>
<td>254936</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helipterum</td>
<td>256214</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ficus</td>
<td>254939</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaultheria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterodendron</td>
<td>256225</td>
<td></td>
<td></td>
</tr>
<tr>
<td>genus</td>
<td>species</td>
<td>page numbers</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>Hibiscus</td>
<td>Leptospermum</td>
<td>254969, 256456</td>
<td></td>
</tr>
<tr>
<td>Hovea</td>
<td></td>
<td>256226, 256457, 256578, 258512</td>
<td></td>
</tr>
<tr>
<td>Hypocalymna</td>
<td></td>
<td>254970, 255090, 256295, 256774</td>
<td></td>
</tr>
<tr>
<td>Isopogon</td>
<td>Leptospermum</td>
<td>260109, 260110, 260111</td>
<td></td>
</tr>
<tr>
<td>Isotoma</td>
<td>Leschenaultia</td>
<td>254769, 256581</td>
<td></td>
</tr>
<tr>
<td>Kennedya</td>
<td>Livistona</td>
<td>255635, 260120</td>
<td></td>
</tr>
<tr>
<td>Kunzea</td>
<td>LOTUS</td>
<td>256228</td>
<td></td>
</tr>
<tr>
<td>Lambertia</td>
<td>Macrozamia</td>
<td>256302</td>
<td></td>
</tr>
<tr>
<td>Lasiopetalum</td>
<td>Melaleuca</td>
<td>255013, 255014, 255015, 255099</td>
<td></td>
</tr>
<tr>
<td>Lavatera</td>
<td>Olearia</td>
<td>256588, 256606, 256659, 256781, 256782, 256784, 258519, 258520, 260808, 260120</td>
<td></td>
</tr>
<tr>
<td>P.</td>
<td>Pelargonium</td>
<td>256519, 256590</td>
<td></td>
</tr>
<tr>
<td>Persoonia</td>
<td></td>
<td>256611</td>
<td></td>
</tr>
<tr>
<td>Petalostylis</td>
<td></td>
<td>256714</td>
<td></td>
</tr>
<tr>
<td>Petrophiia</td>
<td></td>
<td>256311</td>
<td></td>
</tr>
<tr>
<td>Petrophila</td>
<td></td>
<td>255108</td>
<td></td>
</tr>
<tr>
<td>Phebalium</td>
<td></td>
<td>255595, 255596</td>
<td></td>
</tr>
<tr>
<td>Pimelea</td>
<td></td>
<td>256472, 260129</td>
<td></td>
</tr>
<tr>
<td>Prostanthera</td>
<td></td>
<td>256313, 256314, 256591, 256718, 256793</td>
<td></td>
</tr>
<tr>
<td>Rulingia</td>
<td></td>
<td>258524</td>
<td></td>
</tr>
<tr>
<td>Ranunculus</td>
<td></td>
<td>256592</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>T</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>Scholtzia</td>
<td>Tecomantehe</td>
<td>Undetermined</td>
<td></td>
</tr>
<tr>
<td>255111</td>
<td>253223</td>
<td>256244</td>
<td></td>
</tr>
<tr>
<td>Solanum</td>
<td>Teucrium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>256239</td>
<td>256725</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterculia</td>
<td>Thomasia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>256437</td>
<td>256320</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stenocarpus</td>
<td>Thryptomene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260136</td>
<td>254775, 254776, 254941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stylidium</td>
<td>Thysanotus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>256795, 258525, 258526</td>
<td>256593</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swainsona</td>
<td>Trichinium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>256242, 256724</td>
<td>255117, 256479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syncarpia</td>
<td>Turraea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>256317, 256318</td>
<td>256321</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xanthorrhoea</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>256799</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xanthostemon</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>256482</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xylomelum</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>255133</td>
<td></td>
</tr>
</tbody>
</table>