Three Australian Sundews

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Southwestern Australia is a botanically remarkable area where plants assume growth forms not common elsewhere, where they adapt to their specialized habitats in uncommon ways and where they grow in some of the world's most nutritionally incompetent soils. Sundews are restricted to poor soils and the Western Australian soils, sarcastically referred to by some farmers as "silver loam," are ideal in this respect. More than half the *Drosera* species occur in the southwestern corner of the state between Perth and Albany. The *Drosera* soils which I have tested are acidic with a pH range of 4.8-6.2, are very deficient in nitrogen and usually low in organic matter. Such soils also support a rich orchid flora until cleared for agriculture. All *Drosera* habitats are moist in winter and most are totally dry at the surface in summer. Winter frosts are occasional but never last long and summer temperatures are often above 40°C during the several rainless months. Sundews are dormant during this time, as seeds in annual *D. glanduligera*, as buds perched above the hot sand and gravel in the pygmy species, or as deeply buried white, yellow or red tubers in the other perennial species.

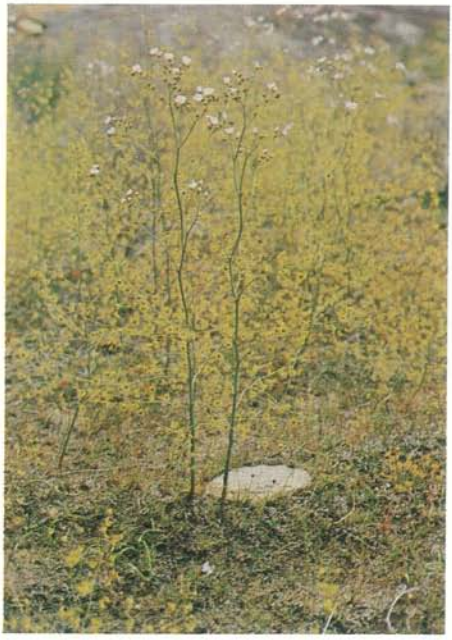
Drosera gigantea (Pl. A, P. 14) thrives in some coastal white sand swamps where it forms large colonies of branched yellow-green 20-100 cm tall plants covered with small white flowers in the September - October spring. It also forms large populations in the wet gravelly laterite soils below granite outcrops in the Darling Range just inland from the west coast as well as farther inland in similar shallow soils over granite. *Drosera gigantea* corms are buried deeply in the gravel and sand and are difficult to extract without digging equipment. The seasonally wet outwash areas are botanically rich in other unusual plants such as ephemeral trigger plants and bladderworts, several showy orchids, kangaroo paws, grass trees and bright-flowered shrubby members of the Myrtaceae and Proteaceae. The vernal pools on the granite have their share of unusual short-lived aquatic plants, including pygmy *Isoetes* species.

Drosera stolonifera is a variable species with several growth forms. Near Perth it grows in the white sand swamps of the coastal plain as luxuriant 4-branched plants, the inflorescence of white flowers emerging from the center of the green cruciform system. Plants seem to flower and seed best after summer brush fires although this may be subjective. They are much more visible after such fires. The Darling range form growing in laterite develops considerable red in the leaves and stems and also flowers profusely after fires. [* Photo taken (on slide & date)]

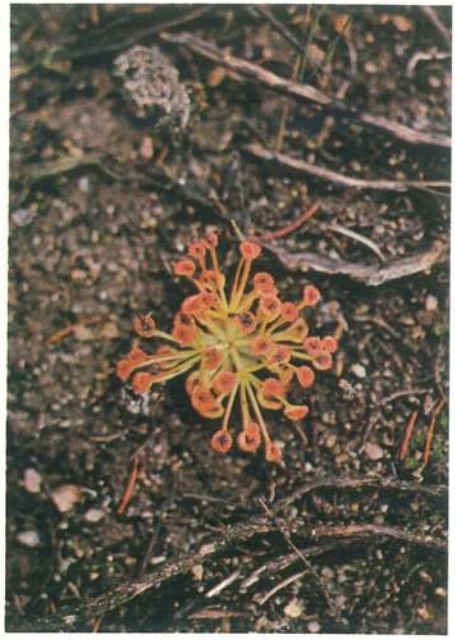
Drosera zonaria grows in sterile white sand where it forms large patches of green, red-edged rosettes. The species flowers so rarely that few botanists have ever seen the event. Leaf rosettes begin to turn brown and begin dormancy early in the spring days, disappearing completely by early summer. While growing it is one of the most colorful but not the largest of the rosette species.

SPECIAL NOTICE

In the June , 1979 issue of CPN on page 45 (CPN 8:45), there appeared a notice by a Mr. Steve Hawkins offering a booklet of CP line drawings for 50 cents. One of the co-editors (DES) has received a letter from an individual who sent for the booklet (50 cents enclosed) in August, 1979, and has not heard anything. A followup letter went unanswered, and co-editor Don Schnell also sent a letter to Mr. Hawkins with again no reply. We are warning others not to send for this booklet until the matter is resolved. In the meantime, we would like to hear from others who sent for the booklet and have or have not received it.



D. gigantea Plate A.
Photo by Warren Stoutamire



D. stolonifera Plate B.
Photo by Warren Stoutamire

D. regia Plate C.
Photo by Jim Miller

D. regia. Plate D.
Photo by Jim Miller