I have also planted a few non-native CPs near the dam, and so far, most appear to be growing reasonably well, but time will tell as to how many types will grow in this soil here. So far *Dionaea*, *Drosera binata* var *dichtoma*, *Cephalotus*, *D. filiformis var filiformis*, *D. adelae*, *D. slackii* and a few Sarracenias have been planted out. Others will follow as time permits.

Anyone wanting to contact CARNIVOROUS SUPPLIES or Bruce Pierson, formerly of P.O. Box 179 Albion Park, NSW 2527 Australia should now write to: Bruce Pierson, Lot 5, Riverpark Court, Riverview, QLD 4650 AUSTRALIA.

We still have a range of CP seed available for sale or trade, although it will be some time before the nursery is in full swing, due to getting resettled.

The Discovery of a New *Pinguicula* from Ayautla, Oaxaca, Mexico

By Alfred B. Lau Apartado 98 Cordoba, Ver. 94500 Mexico

In early 1987 I tried to get through the new road from Jalapa de Diaz, to Huautla de Jimenez where I looked for new plant material. One Cycadacea in particular I wanted to photograph in habitat, Dioon rzedowskii. There were rare species of palms in the genus Chamaedorea close to the Rio Uruapan. I followed the river with several children from Jalapa de Diaz who in the process got lost and spent the night close to the waterfalls. At around 2 a.m. we found them again, sound asleep in the crevices of eroded rocks. At the entrance to the cave where Rio Uruapan begins (there is no trail to the area as the people believe that the river is bewitched), we collected a new Peperomia, and beautiful specimens of Tetranema mexicana (Allophytum) which were in full bloom in the huge hollow from which the water proceeds. It is surprising that this plant can thrive with such

little light. Around the large cave, but out of reach, I saw big, yellow blotches of leaf rosettes which undoubtedly were those of *Pinguicula* with flowers that resemble *P. agnata*.

Because of the oncoming darkness we could not explore in more detail. A few months later the dirt road was dry enough to travel to Ayautla. I scanned the almost vertical wall of Cerro Rabon on the approaches and was surprised at the large populations of a form of Agave attenuata in an area of 3000 mm rainfall annually. Approaching the Mazateco Indian village of Ayautla, one of the most picturesque in the State of Oaxaca, I noticed big blotches of yellow and asked the Indian boys who accompanied me for my binoculars. There were these large Pinguiculas again, in fully exposed rock in the heat of the tropical sun. We climbed the steep hill until we reached the wall. Together with this fabulous Pinguicula we also admired marvelous specimens of Tilland-

Habitat of the large P. from Ayautla, Oaxaca (right)





Close-up of the large P. from Ayautla, Oaxaca

stick is on the whole plant and not only on the upper sides as in other examples of this genus.

It is to be assumed that the species grows on the south side of the steep walls from Rio Uruapan and its source until above Ayautla where the walls peter out. The plant can easily be propagated by leaf cuttings and seed It is robust and withstands the hardest rains since it is well attached to the walls.

sia streptophylla. Some of the best climbers of our boys reached the plants where photos were made which turned out to be spectacular. What was unexpected: The leaves catch insects on the upper and lower sides, which means that the substance to which the insect



Insect trapped on the underside of the leaf.

The Possible Functions of the Thorns of Nepenthes bicalcarata (Hook. f.) Pitchers

By Charles Clarke Department of Ecosystem Management University of New England Armidale, N.S.W., 2351, Australia

The tropical pitcher plant, Nepenthes bicalcarata Hook. f., is a common plant in the great peatswamp forests on the northwest coast of Borneo. It is readily distinguished from all other Nepenthes by the two large thorns (or "fangs") which protrude downwards from the base of the pitcher lid (Figure 1). These thorns may attain lengths of three centimetres on large specimens, and some of the largest pitchers may have a capacity of more than half a litre. Both the lower and upper pitchers possess the thorns. In terms of the plant (rather than the pitchers), N. bicalcarata

Figure 1. (right) An upper pitcher of Nepenthes bicalcarata. Note the two thorns below the lid. This pitcher is about 12 cm in height.

