The Blue Mountains Proving Grounds of the Fork-Leaved Sundew

By Ivan Snyder

In November of 1991 I had the great pleasure of travelling to Australia. This was to be a very extensive trip of three weeks. First, flying from my home in southern California to Sydney, Australia. Then renting a car and driving to South Australia, up into Alice Springs in central Australia, next northeast to Cairns, and then returning back to Sydney driving along the coast. While in the Sydney area at the beginning of this trip, an Australian friend, Rick Tyler, had decided to go for a hike in the Blue Mountains. Rick, whom I had hiked with on a previous trip to Australia is not a carnivorous plant enthusiast like myself, but is a very experienced and powerful bushwalker. Rick asked me what type of area I would like to see since there were several options in the type of range in the Blue Mountains. I explained that I would like to explore an area with plenty of water as around creeks and springs to search for CP sites. Rick then led me on the most fantastic hike I have ever experienced. The precise location of the hike I will not reveal in order to protect certain plants which I will describe since I do not know of these plants rarity. The first CP species I found here was *Drosera binata*, known commonly as the fork-leaved sundew. I encountered the two forms, variations T-form and *dichotoma*. These plants were in a habitat growing under conditions in which I would not previously have expected to see this species. The conditions of the habitat proved the success of this species trap design and overall structure. These plants were growing on vertical sandstone cliff walls rooted in horizontal crevices where moisture seeped out from and down along the rock. Some plants were growing in beautiful miniature gardens of sopping wet green moss together with ferns. Other fork leaves sprouted out of dry cracks where it would seem difficult to root. The largest plants I saw were of the *dichotoma* variety and were growing from-crevices just above pools of water at the base of waterfalls. The leaf petioles drooped down towards the pools surface and the traps held above the water in a manner as if to capture insects flying about around the pools. The largest trap leaf I found is pictured in the photo, (left) the size of which would have to be witnessed to be believed. The photograph does not do the reality justice. This trap was full of captured mosquitoes. Rick and I hiked along a trail for several miles the path of which brought us down a cliff into a canyon and back up again. The trail was for advanced hikers only and was very narrow and wet from seepage in some places to offer a very treacherous foothold along the precipice of a very frightening height. For miles we encountered the fork leaves and I took notice of differences in growth habit in separated groups. Most plants growing in sunny spots had more strongly growing upright leaves, while

those plants which grew in shaded spots had more weakly formed leaves that drooped downwards. Also I noted that some plants grew in a radial fashion, the leaves spreading outward from the plant center in all directions and with the leaf petioles pressed against the stone of the vertical cliff face. Further on along the trail I nearly stepped on a cluster of fork leaves that were growing on the trail. These plants were growing as the others I had seen with their petioles pressed against the substrate, but these plants were growing horizontally with robust leaves which should be growing upright. It then occurred to me that perhaps this growth pattern was not simply caused by growth conditions in a particular spot, but maybe an inherent trait. I decided the test to this would be to see if this growth habit was sustained in cultivation under normal conditions in which a typical plant should form upright leaves. Now, at home, the plants I have grown still display the unusual growth pattern. In good light the petioles are pressed against the soil while they unfurl. I have not seen any reports of fork leaves with this growth variation, and I feel that this should be researched. Pardon my grandiosity, but I think that if this plant does turn out to be a new variation a good name for it would be *D. binata* var.*prostratus*, or commonly referred to as prostrate form. In addition to fork leaves I saw a few other CP species on this hike. Deep red plants of white flowered *D.spathulata* were growing in two patches on rocks next to a pool at the base of a waterfall. I was surprised not to have seen any of the typical pink flowered form on this trail since they are common elsewhere. I saw a single plant of *D. auriculata* flowering at the time on a stream bank. A good crop of *U. dichotoma* flowering around the edge of a pool on wet sandy soil was seen. And one other species that was probably *U. lateriflora* but not in flower at the time was found on the cliff wall amongst what seemed to be a very fine leafed liverwort, though from a distance it looked just like a moss. *D. binata* was by far the most prevalent of all the carnivorous flora I saw in this range. The Blue Mountains of New South Wales Australia is truly the proving ground of this species. For me, seeing these plants in such a spectacular habitat is a most memorable experience.
