

Oda, K. and J. Linstead, (1975), *J. Exp. Bot.* 26: 228-239.

Williams, S. (1991) *Carnivorous Plant Newsletter*, In Press

Williams, S. and A. Bennett (1982) *Science* 218: 1120-1122.

¹ You can test the turgidity yourself with a probe, such as a ballpoint pen. Push the probe gently into the epidermis of each side of an open trap. If your plant is well watered it will be turgid (hard). Close the trap by stimulating the hairs twice. Probe the trap soon after closure. It will be flaccid (soft) and your probe will sink in a bit. Cut the trap down the center and probe the inside. It will be turgid. This is what the acid growth mechanism predicts but it is the opposite of what a turgor mechanism would predict.

² Mannitol is a sugar alcohol often used in experiments on osmotic pressure. APW stands for "artificial pond water" and is often used in electrophysiological experiments on freshwater and terrestrial plants.

A Letter From Sierra Leone¹

Dear CPS:

I hope all is well, I hear there's been quite a hard winter, not too many casualties I hope.

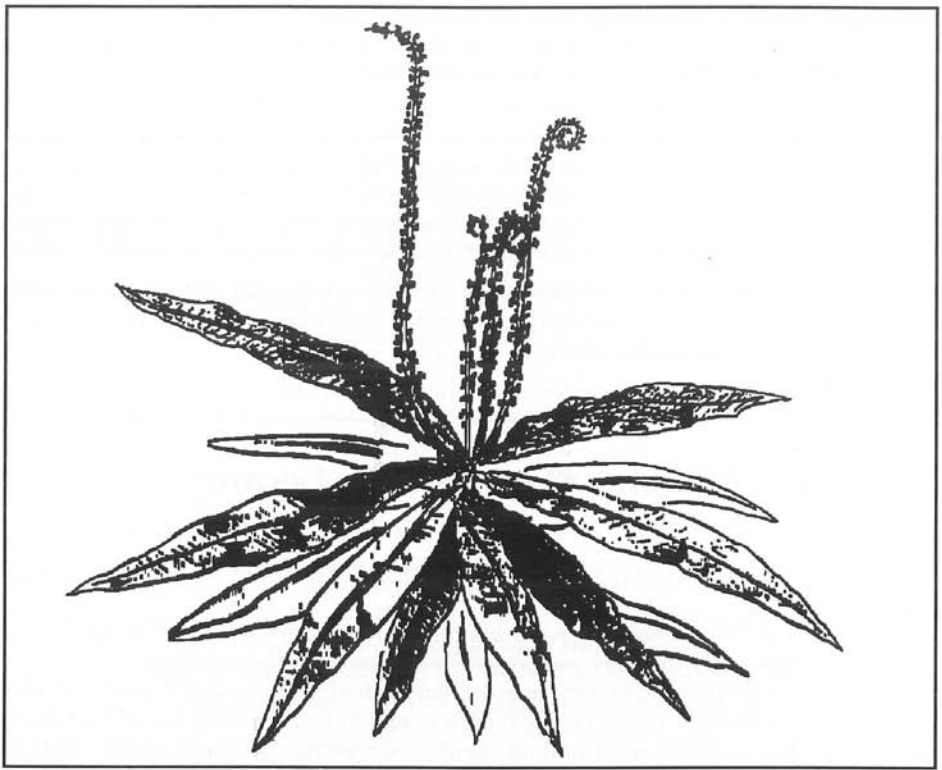
After a long, *Triphyophyllum peltatum* filled silence, I write again (I would like to think more coherently than my last tropically stunned communication).

I have been in West Africa some months now, although my time in 'Tome' land (the plant's name in Mende - one of the local tribes - and in fact the only one of S. Leone's ten or so that has a word for it) is split into two by a Christmas gadabout in Mali. Before leaving the country for Christmas then, I went around bush paths, small villages (they are spiders with leg paths) going nowhere in particular enquiring about the plant. This was some adventure in itself - in villages in the south-western part of the country, it is not widespread and so only the elders who had made studies of plants, usually medicine men or witch doctors, knew about it, and my investigations were often met with some difficulties - sometimes it would be growing in sacred society bush, which a non-member cannot enter ("coco jinoku, mahanhoo mahmoo gonge" is a Mende proverb which means something like "We who are in the Society and know, are not going to tell you, so nur nur-ne nur nur", dispensed freely to those who ask too many questions). Another problem was a fierce old man with a bald head save for a few white popples of hair, who demanded in payment for the knowledge of a medicine man, that I should marry his daughter.

The first time I did see the plant I was unimpressed - a blackish liana twizzling up into the sky via an ant-covered giant tree. Somewhere up there I fancied, just maybe, I could see the characteristic tendrilled leaves; climbing was out though.

As I moved further eastwards, the plant became more common, as far as I could tell as the surrounding bush changed from heavily cultivated farm bush type to predominantly old secondary forest with patches of farms and patches of primary forest. It was about here that people would proudly announce that they had seen "Tome" on their farms - and show it to me before cutting it down with surrounding trees ("brushing") to make room for next year's rice crop.

All I saw, despite huge searches, was the mature lianas, or the seedling in the first growth stage. I began to remember that many botanical hoaxes have concerned carnivorous plants, but dutifully planted a nursery bed by a stream to return to at a later date! (Actually, I don't know where I remembered that from, I probably made it up. It's the sun you know)



A young plant of *Triphyphyllum peltatum*

After Guinea and Mali on horseback, I returned to Sierra Leone in late January through her eastern earhole, Koinda and knew things were looking up. After crossing the border/river without the necessary squiggles and stamps in my passport (corruption, and this time I really had run out of local money at the border so I couldn't have paid the fairy-tale fee even if I'd wanted to) instead of sending me back the customs officer took me to his farm in the full moon and we enjoyed freshly tapped palm wine. Bubbling, like yeasty lemonade it is very refreshing. The evening was only tainted by a whiff of engine oil - the palm wine (or poio) came from a 5 gallon oil can. Each individual tree is tapped and the stuff collected in a calabash on a vine - you scale the tree and let it down to your friend and he drinks half and puts half into the pot - or something like that. Later in the Gola forest, the kindly but very pious Muslim man who had received me decided I was drinking too much so I should have my own palm tree to take care of. Quite a challenge. I stayed in that village quite a while. It was here that I saw my first huge chunk of primary forest - an infinite and beautiful cathedral inside - and here on the edge I first saw *Triphyphyllum* in the carnivorous stage. Not just one plant or two, but I would guess about a hundred, no doubt in the hinterland of a vast liana, these seedlings were of different sizes (so I presume ages) ranging from about 10 cm high to about 50 cm, nearly every one with at least (and in fact usually) one betentacled glistening wire. I never have seen more than three trapping wires alive at the same time per plant, though there are often dead, dried up ones, hanging down. This suggests that perhaps the carnivorous phase can be quite long-lived. The wires seem to unfurl in a similar manner to *Drosophyllum* and are in fact I believe a specialized form of midrib of the ordinary leaves, judging by an

intermediate form I spotted one day. Interestingly enough, I have seen more plants in old secondary forest than I have in primary, so just maybe it is not as endangered as it could be, since virgin forest now covers only 4% of the land area of this country, compared to 95% two hundred years ago. (I think these are the numbers I was told, but I don't swear.) Secondary forest, the most plentiful kind in that area now, differs in that there are few big big trees, and consequently without the high canopy of the vegetation inside is much more dense.

I am returning to England early April with hopefully, some specimens. I have collected seed, pressed flowers and leaves and am in the process of obtaining the necessary documents from the Sierra Leone Government to bring back a live specimen. I'm afraid I'm a bit out of touch with what is going the CPS currently - I forgot to join last year and this year so far I have been kind of out of it - if "we"/you have a conservation collection yet then I think *Triphyophyllum* would be a good candidate.

I learnt early on that the road to Tome is cultural sensitivity and that in itself has taught me a huge amount and brought literally months of tremendous enjoyment. Come to "sunny Salone"!

Best wishes,
Jonathan

PS I'm at the foothills of the country's highest hill at the moment. Mt. Bintumani, where there are supposed to be some epiphytic Utrics. Eyes are open. Also seen plenty *Genlisea africana*. See you soon.

PPS I'm not a botanist - if any of this is rubbish please add this disclaimer!

¹ Reprinted with permission from *The Carnivorous Plant Society Journal*. Spring, 1991 (Vol. 15 #1)

Announcement

In March, 1992, CITES met in Kyoto, Japan and placed *Dionaea* in Appendix II. Appendix II species are not deemed presently threatened with extinction but could become so unless their trade is regulated. Import permits are not required. However, export and reexport permits are required from the export country certifying that the shipment will not place the plants in a threatened status. This rule applies to whole plants as well as plant parts.

No Longer Accepting Orders!

Hummer's Acid-Wetland Flora
1705 N. Quebec Street
Arlington, VA 22207