In Search of *Utricularia pobeguinii*: a Field Trip in Guinea, Western Africa

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In December 1992, I traveled to Guinea (capital: Conakry), in West Africa. Before my trip I prepared myself a little bit because I was curious which carnivorous species I could expect. Only a few *Drosera* species grow in this country, so this was not very spectacular. Nevertheless, according to Taylor's monograph, sixteen *Utricularia* species grow in Guinea, a substantial part of them being restricted to West Africa. My attention was especially attracted by the species *U. pobeguinii*, which is found only in a very small region within Guinea. Further carnivores are some species of the genus *Genlisea*, which I unfortunately did not find.

During my stay, I visited only two sites with carnivorous plants; nevertheless ten of the sixteen *Utricularia* species occurring in Guinea were found. The first spot was at the side of the main road from the capital to Kindia, between Tabili and Mambia, in the mountains at an altitude of approximately 500 m above sea level. I saw this spot from the car on an earlier trip to Kindia. During that trip, it drew my attention because of the yellow flowers and the water that was seeping over rocks. Later (30 December) I returned, and succeeded in convincing the bush-taxi driver that I really wanted to get out at this particular spot (at first he did not want to stop because there was no village). The yellow flowers I saw from the car turned out to be a *Utricularia*, and after some nosing about, I found eight carnivorous plant species.

U. macrocheilos: This was the plant that I saw already from the taxi. It is a plant with tall scapes 10—30 cm high, with large bright yellow flowers (see front cover). This was the most abundant species on the site. It was growing in a wet sandy soil layer on top of a rock

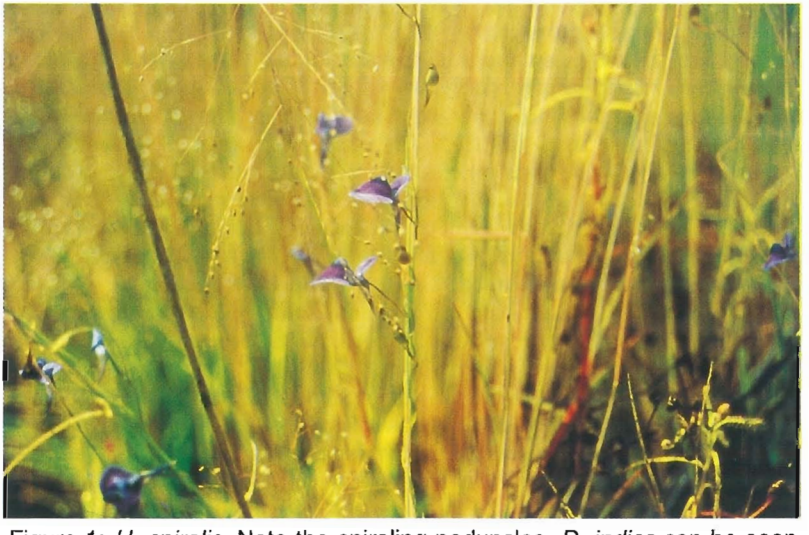

Figure 1: *U. spiralis*. Note the spiraling peduncles. *D. indica* can be seen in the corner and in the background.



Figure 2: *U. firmula* (yellow flowers) and *D. indica* (pink flowers).

subsoil.

U. scandens: At first I thought this was the same as the former species, but the scapes are much smaller, 4—10 cm, and the spur in this species is tubular and narrow, while it is wide and conical in *U. macrocheilos*. The flowers are bright yellow. Here it was growing between *U. macrocheilos* and tall grass.

U. spiralis: This was also one of the more striking species, with large violet flowers, with a notable bright blue spot on the swollen part of the lower lip (Figure 1). The scapes were always twining, up to 30 cm tall. This species has a preference for the wettest spots, growing amphibiously in a muddy substrate, in which I was sinking up to my ankles.

U. firmula: Also a very abundant species with tiny scapes 3—10 cm tall, the flowers are yellow with a red spur (Figures 2, 3). It seems to have a preference for the spots with a lot of iron, at least the surface was rust-coloured. It was growing together, or at least in the vicinity of *U. pobeguinii*.

U. pobeguinii: This was the species I searched for especially, and I was very happy to find it (Figure 3). Some time ago, Peter Taylor lumped this species together with *U. spiralis*, but later separated them again in his monograph. I think this was a wise decision,



Figure 3: *U. pobeguinii* (blue flowers), *U. firmula* (yellow flowers), and *D. indica* (pink flowers).

because for me it was obvious that this is a distinct species. According to Taylor's monograph, the characteristic feature of *U. pobeguinii* is the obtuse spur, but other differences are: *U. pobeguinii* prefers a dryer habitat, is not twining, it has less tall scapes of 3—7 cm, and the flowers are blue with a white patch at the base of the lower lip.

U. pubescens: Although this species is widespread in the region, I found only a few plants with very tiny scapes (4 cm). This species was easily distinguished by its peltate leaves. The flower was a very pale purple.

U. subulata: Many of my comments regarding *U. pubescens* apply to this species, only a few plants were found of this so-called carnivorous plant weed. The scapes were up to 10 cm and bore up to ten pale yellow flowers.

Drosera indica: This species preferred the same spots as *U. pobeguinii* and *U. firmula*, it had pink flowers and was quite abundant (Figures 2, 3).

The second spot, which I visited on 3 January, is near the city of Kindia. It is northwest of the city, near Mount Gangan, and at the same altitude as the city (approximately 300 m). It is only a fifteen minute walk to the north from the hotel "Phare de Guinee" at the western part of town. From the above described species I found *U. macrocheilos*, *U. spiralis*, *U. subulata*, *U. firmula* and *D. indica*. In addition to these, I found also three other species.

U. micropetala: This is closely related to *U. macrocheilos*, but it appears to me that this species deserves a specific rank. The swollen spur of this species is relatively huge, the spur makes out 80% of the length of the flower. I found only small specimens, the scapes being up to 7 cm.

U. tetraloba: This species is a rheophyte growing in very shallow streaming but calm water. This was the most tiny species I found, the scapes being only 1—2 cm. Relatively the traps were quite big: 1 mm. The habitat was typically on a bare horizontal rock surface, at the margin of a layer of soil and vegetation on these rocks.

U. rigida: Also a rheophyte, this is closely related to *U. tetraloba*, but prefers another habitat: almost vertical rock surface with swiftly running water. At the time I visited the site it was not flowering anymore, but a lot of scapes with capsules were found. This, and the very typical habitat, was enough to identify this plant.

I took some plant material back home, but I did not succeed in growing any of the species. Although I succeeded in germinating the seed of *U. tetraloba* and *U. rigida*, I did not succeed in keeping them alive. I tried a setup with a little water pump and some rocks, but when algae became a problem I tried a mild algicide. First the seedlings reacted very well, and even were growing faster, but later on they died back. In the future I may well be traveling again to this country, so I might try again to bring some of these species into culture.

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From the pages of Carnivorous Plant Newsletter 25 years ago

Many of us have seen abnormal plants displaying "false vivipary," where mutated flowers produce plantlets instead of normal parts. This is not too uncommon in *Drosera* or *Dionaea*. But T. L. Mellichamp reported a real rarity: "I have observed this same phenomenon in the inflorescence of *Sarracenia purpurea* in northern Michigan along the sandy, marly beaches just west of Mackinaw City at the Straits. The inflorescence (?) was no taller than the rather compact, neat pitchers and it consisted of a rather disfigured rosette of pitcher leaves, instead of floral parts sitting upon the peduncle....there were many normal plants around."



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Front Cover: *Utricularia macrocheilos*. Photo by Martin Zevenbergen.
Rear Cover: *Pinguicula caerulea*. A painting by Scott Bennett.

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