

More knowledge about *Nepenthes rhombicaulis*

Rudolf Schmid-Hollinger, Quellmattstrasse 28, CH-5035 Unterentfelden, Switzerland

N. rhombicaulis was described in 1973 by Kurata. In 1993, I had the opportunity to climb on some Pangulubao chains near Lake Toba, North Sumatra, and to see *N. rhombicaulis* in several places. I discovered the very rare pitcher of the climbing stem, until then not known. Following are some more details about this species.

Pitchers of the climbing stems are very rarely developed. The form of these pitchers is quite different (Fig. 1) from the form of the ground pitchers (Fig. 2). Climbing pitchers are also broad near the base and ventricose, but the upper part of the pitcher is more elongated, tubiform to slightly infundibuliform towards the mouth. The whole shape is slender compared to ground pitchers. Pitchers of short shoots situated laterally on climbing stems (Fig. 3) some meters above ground are very similar, but the colors are strikingly different.

Climbing stem pitchers: Ventricose part yellow-green, upper part slightly spotted (pale red spots).

Short shoot pitchers: Whole pitcher with clear red spots.

There are also differences in the formation of the peristome: Short shoot pitchers have a broad, undulated peristome as in ground pitchers. Pitchers of elongated stems have small, reduced peristomes.

Digestive glands: There is no great difference between ground and hanging pitchers. In both cases the distribution, shape and number of digestive glands are similar, 150-300 glands per 1 cm², dark, transversely oriented. In the upper digestive zone they are strongly overarched by the epidermis; in the base of the pitcher they are more round and nearly free.

Teeth of the peristome: The peristome, incurved into a small neck below the lid shows visible teeth in ground pitchers, 1-2 (-3) mm long. Hanging pitchers have strongly reduced teeth according to the finer peristome.

Wings: Elongated stem pitchers show reduced wings with few fimbriae.

Nectar glands: Ground pitchers have few to 100 glands on the underside of the lid. They are flat, dark, surrounded by a bright rim and of different size. In the middle of the lid base they are longitudinally oriented, at the side they are smaller and often transversely oriented. Pitchers of elongated stems have several hundred nectar glands, which are smaller and distributed regularly. Only the small margin has no glands.

These differences in number and distribution of nectar glands on lids of ground and hanging pitchers seem to follow a general rule (see *N. madagascariensis*, Schmid-Hollinger 1979).

Literature

- Danser, B.H. 1928: The Nepenthaceae of the Netherlands Indies. Bull. Jard. Bot. Buitenzorg ser. 3, 9, 249-438.
Kurata, S. 1973: Nepenthes from Borneo, Singapore and Sumatra. Gard. Bull. Sing. 26, 227-232.
Schmid-Hollinger, R. 1979: Nepenthes-Studien V, Die Kannenformen der west-lichen Nepenthes-Arten. Bot. Jahrb. Syst. 100, 3, 379-405.



Fig. 1 : The very rare elongated stem pitcher



Fig. 2: Ground pitchers with broad, undulated peristome



Fig. 3: Short shoot pitcher (left) and elongated stem pitcher (right), both hanging some meters above ground



Gordon Snelling says that Southwest Carnivores is closed for business until further notice. **Please no orders.**