

A new Species of *Nepenthes* from Sulawesi, Indonesia

SHIGEO KURATA

*Insectivorous Plants Society of Japan, Department of Biology, Nippon Dental College
Fujimi, Chiyoda-Ku, Tokyo, Japan*

EFFECTIVE-PUBLICATION DATE: 7TH MAR. 1984

Introduction

During my stay at the Herbarium Bogoriense in 1972, for the study of their *Nepenthes* collection, I was able to examine much undetermined material from several Indonesian islands. While going through those collected by P. J. Eyma in Sulawesi, I came across a very interesting *Nepenthes*. After subsequent study, I am now able to conclude that it should be described as a new species.

Nepenthes dentata Kurata, sp. nov.

Plate 1 & Fig. 1

Nepenthes dentata Kurata, *nomen nudum*, in *Nepenthes* of Mount Kinabalu, (1976) 11.

Planta tenuis, alte scandens. Caulis cylindricus vel obtuse trigonus, 4-5 mm crassus, glabra. Folia inferiora ignota. Folia superiora coriacea, sessilia, lanceolata vel elliptica, glabra, 10-12 cm longa, 3-4 cm lata, apice obtusa, basi rotundata vel leviter cordata, caulim $\frac{2}{5}$ amplectens, sine vagina, utrinque glabra; nervi longitudinales utrinque 3-4, nervi transversales obscure, oblique ascendentes; cirrhus tenuis, cylindricus, 10-12 cm longus, glaber. Ascidia inferiora ignota. Ascidia superiora coriacea 18-22 cm longa, 3.5-4.5 cm lata, parte inferiori anguste ovata, parte superiori cylindrica vel leviter infundibuliformia, intus parte $\frac{1}{4}$ inferiori glandulosa, costis 2 prominentibus; os ovatum, obliquum; peristomium pectinatum, dentibus magnis, lamellaribus, falciformibus vel lunaribus, 12-16 mm longis, 2-3 mm latis, 5-6 mm distantibus; operculum elliptico-ovatum, 4.5-5.5 cm longum, 4-5 cm latum, subtus planum; calcar ca. 6 mm longum, filiforme. Inflorescentia mascula dense racemosa, ca. 15 cm longa; pedunculus ca. 10 cm longus, glaber; pedicelli insigniter tenues, 10-15 mm longi, 0.1-0.2 mm crassi, uniflori, glabri; sepala 4, elliptica, ca. 1.5 mm longa, ca. 1 mm lata, extus glabra, intus glandulosa; columna staminea 2-2.5 mm longa; antherae 6-8, uniseriatae. Inflorescentia feminea ignota.

SULAWESI. Central Sulawesi; G. Lumut, between bivouac II and III on the north spur, 3 Sept. 1938, *P. J. Eyma* 3572 (holotype & isotype, BO).

Stem slender, climbing high, the part with adult leaves 4-5 mm thick, cylindrical or obtusely trigonous, glabrous. Lower leaves unknown. Upper leaves scattered, coriaceous, sessile, lanceolate or elliptic, 10-12 cm long, 3-4 cm broad, the apex obtuse, the base rounded or slightly cordate, obliquely clasping the stem for $\frac{2}{5}$, longitudinal nerves 3-4 on both sides, pinnate nerves running obliquely towards the margin, irregularly reticulate; tendrils slender, 10-12 cm long, cylindrical, glabrous. Lower pitchers unknown. Upper pitchers coriaceous, 18-22 cm high, 3.5-4.5 cm broad, narrowly ovate in the lower part, cylindrical or slightly infundibuliform in the upper part, with 2 prominent ribs; mouth oblique, ovate; peristome pectinate, the teeth large, lamellate, falcate or crescent-shaped, 12-16 mm long, 2-3 mm broad, arranged on the narrow cylindrical base at intervals of 5-6 mm; inner surface of the pitcher glandular in the lower ovate part, the glands rounded and exposed

5 Cm



HERBARIUM
 No. D. P. EYMA
 No.
 Family
 Genus
 Species *dentata*
 Author
 Locality
 ad locum
 Date
 Collector
 No. Vamenta
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

Plate 1. Holotype of *Nepenthes dentata* Kurata sp. nov. (Eyma 3572).

(not overarched); lid elliptic/ovate, 4.5–5.5 cm long, 4–5 cm broad, the lower surface without appendage, with small round glands on the marginal part; spur filiform, about 6 mm long. Male inflorescence densely racemose, about 15 cm long, the peduncle about 10 cm long, glabrous; pedicels extremely thin, 0.1–0.2 mm thick, 10–15 mm long, 1-flowered; sepals 4, elliptic, about 1.5 mm long, 1 mm broad, the outer surface glabrous, the inner surface glandular; staminal column 2–2.5 mm long, the anthers 6–8, uniseriate. Female inflorescence unknown. Colour of the

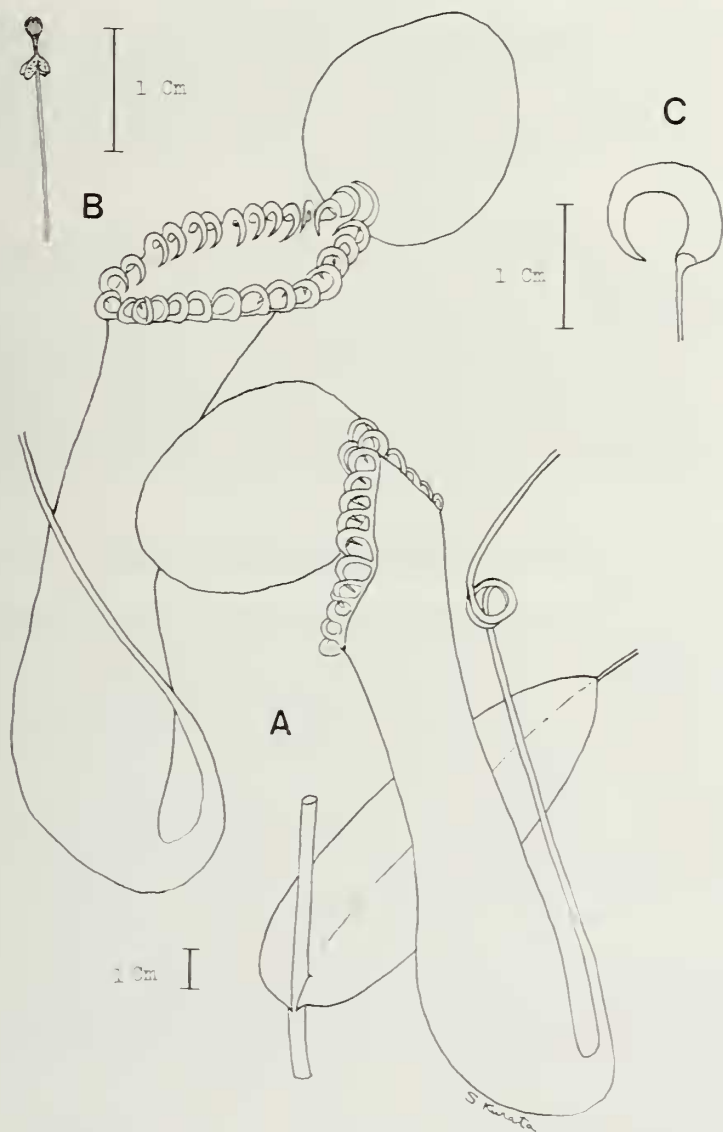


Fig. 1. *Nepenthes dentata* Kurata sp. nov. A: leaf & pitchers; B: male flower; C: side view of a tooth.

pitcher light-green with dark-red blotches or stripes, tooth yellow to light-green.

This new species is closely related to *N. tentaculata* Hook.f. by its sessile leaves, exposed (not overarched) pitcher glands and purplish brown colour of its dried specimen but differs clearly from it by the presence of its unique and remarkably large teeth at the mouth of the pitcher (hence the epithet "dentata"). The flower also characterizes this species by its small dimensions, which is considered to be the smallest in the genus. The pedicel, extremely slender in relation to its length — at most 0.2 mm in thickness — distinguishes this species too.

The teeth, roughly arranged along the slender peristome with an interval of about 5 mm, have the shape of a thin blade of a sickle or crescent and are about 15 mm long. This shape reminds us of two Bornean species (*viz.* *N. villosa* Hook.f. and *N. edwardsiana* Hook.f.) but the present species is not to be confused with them by its superficial semblance as these Bornean species are, all parts considered, quite robust.

The distribution of this species seems limited to a particular area on the mountains of Central Sulawesi.

The author wishes to commemorate P. J. Eyma for his courage and achievement, in bravely stepping into the unknown world of Gunung Lumut forty-five years ago. I also wish to express my thanks to Professor A. J. H. Kostermans of Herbarium Bogoriense for his valuable suggestions in this study and to Dr. R. D. Hoogland who corrected my Latin diagnosis.

Bibliography

- Danser, B. H. (1928). The Nepenthaceae of the Netherlands Indies. *Bull. Jard. Bot. Buitenz.*, 9 (ser. iii).
- . (1935). Note on few *Nepenthes*. *Bull. Jard. Buitenz.*, 13 (ser. iii).
- Harms, H. (1936). *Nepenthaceae*. In A. Engler & K. Prantl, *Die Natürlichen Pflanzenfamilien*, 2nd ed. 17b.
- Hooker, J. D. (1873). *Nepenthaceae*. In De Candolle, *Prodromus systematis universalis regni vegetabilis* 17: 90-105.
- Kurata, S. (1976). *Nepenthes of Mount Kinabalu*. Sabah National Parks Trust.
- . (1973). *Nepenthes* from Borneo, Singapore and Sumatra. *Gard. Bull. Sing* 26: 227-232.
- Macfarlane, J. M. (1908). *Nepenthaceae*. In A. Engler, *Das Pflanzenreich*, 36 (ser. iii): 53-54.