

TWO NEW TAXA IN *HABENARIA* WILLD. (ORCHIDACEAE) FROM SURINAME

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A study of *Habenaria* in Suriname and adjacent regions brought to light two taxa apparently undescribed, one on the specific and one on the subspecific level. The results of the whole study will be published in a forthcoming paper; the two new taxa are published here.

***Habenaria alterosula* Snuverink & Westra spec. nov. Fig. 1.**

Herba terrestris tuberidiis ovoideis; caulis circiter in dimidio plurifolius foliis ellipticis vel anguste ellipticis vel ovatis, acutis, in parte basali vaginis vel foliis minoribus atque in parte superiore foliis minoribus instructus.

Inflorescentia pluriflora floribus ca. 9–17; sepalum dorsale ovatum vel circulare, concavum, obtusum, venis 5; sepala lateralia ovata, valde obliqua, reflexa, obtusa venis 5; petala bipartita. partitione postica lineari obtusa, partitione antica triangulari, reflexa, obtusa vel acuta; labellum basi brevissime integrum deinde tripartitum partitionibus lateralibus linearibus, obtusis, partitione mediana lateralibus similis sed paullo majore; calcar pendulum, filiforme, apicem versus angustatum, obtusum; antherae canales ascendentes; processus stigmatici lingulati.

Terrestrial herb, c. 30–46 cm high; tubers ovoid, to c. 25 cm long and c. 12 mm thick; roots to c. 95 mm long, some with small tubers to 7 × 5 mm at their apex. Stem bearing c. 9–10(–12) large leaves in the middle part, the lower part of the stem (c. 9.5–18.5 cm long) with mostly 4 sheaths or sheath-like leaves (the lamina under 2.5 cm long), the upper part with 2–3 small leaves (under 4 cm long); the large leaves membranous, elliptic, narrowly elliptic or ovate, c. 6.5–17 cm long including a sheath of c. 1.5–2.5 cm long, and c. 10–27 mm wide, acute (to apiculate), reticulate.

Inflorescence several-flowered; bracts foliaceous, ovate, c. 11–22 mm long and c. 3–13 mm wide, acute to acuminate, reticulate; flowers about 9–17, in various shades of (yellow-)green, the petals to cream; dorsal sepal ovate to circular, concave, c. 4.5–5.5 mm long and c. 4.8–5.4 mm wide, obtuse, with 5 veins; lateral sepals ovate, strongly oblique, reflexed, c. 7.5–10 mm long and c. 5.5–7.5 mm wide, obtuse, with 5 veins; petals bipartite, the posterior lobe linear, c. 2.2–3.2 mm long and c. 0.4–0.6 mm wide, obtuse, anterior lobe triangular, reflexed, c. 1.9–3.5 mm long and c. 0.9–1.6 mm wide at the base, obtuse to acute; lip tripartite at c. 1.0–1.5 mm from the base, lateral lobes linear, c. 3.7–7.5 mm long and c. 0.5–1.0 mm wide, obtuse, middle lobe linear, reflexed, c. 11.2–13.8 mm long and c. 1.0–1.6 mm wide, obtuse, the margins revolute; spur pendulous, filiform, narrowing towards the apex, c. 20–27 mm long, c. 1.4–1.5 mm thick at

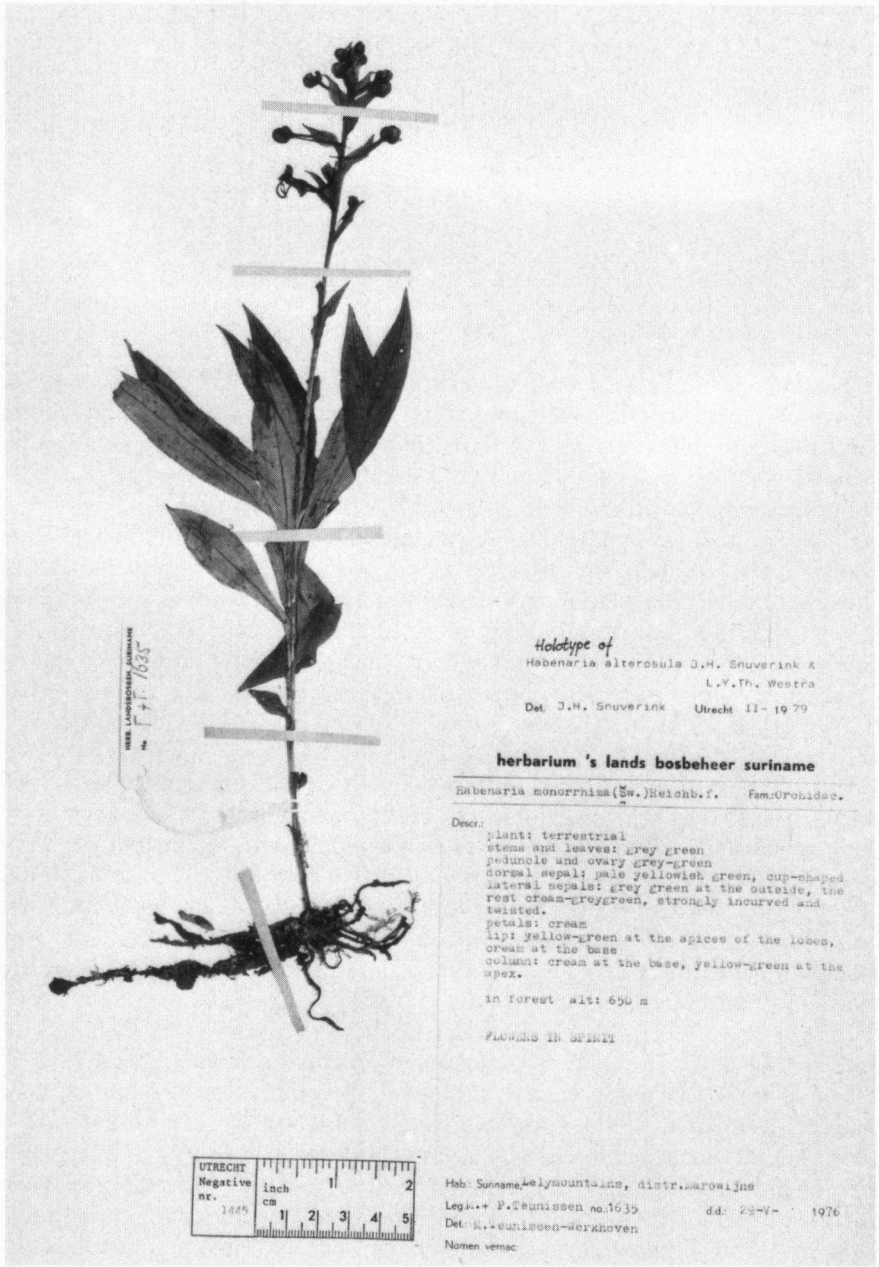


Fig. 1. Holotype specimen of *Habenaria alterosula* Snuverink & Westra (BBS).

the base and c. 0.6–0.8 mm thick at the apex, obtuse; anther-canals curved upwards, c. 3.2–3.6 mm long; stigma-lobes tongue-shaped, c. 2.2–3.0 mm long. Fruit, immature, to c. 20 mm long and c. 5 mm in diameter.

TYPE. M. & P. Teunissen 1635 (holotype, BBS), in forest, Lelygebergte, alt. 650 m, distr. Marowijne, Suriname.

DISTRIBUTION. Suriname and French Guiana; all collected in forest.

SURINAME. Grote Hendriktop, Emmaketen, A. G. H. Daniëls & F. P. Jonker 1018 (U); Lelygebergte, distr. Marowijne, M. & P. Teunissen 1635 (BBS); Emmagebergte, J. G. Wessels Boer 1471 (U).

FRENCH GUIANA. Kwata Kwima, SE-most part, Grenand 1274 (CAY).

A very characteristic feature of this new species is the elevated rosette of leaves (hence the name).

Habenaria longicauda W. J. Hooker, Bot. Mag. 30: t. 2957. 1830. ssp. *longicauda*.

Herbs from wet places, c. (50–)70–130 cm high, the lowest part (c. 7–20 cm) thickly beset with roots of c. 10–30 cm long, some with small tubers, to c. 6 × 4 mm, at their apex. Leaves several (around 8), very narrowly elliptic, spreading, c. 18–33 cm long including the large sheaths (to c. 1/5 of the total length) and c. 10–17(–25) cm wide, acuminate, the upper leaves gradually changing into floral bracts.

Inflorescence few-flowered; bracts foliaceous, narrowly elliptic, c. 45–65 mm long and c. 9–12 mm wide; flowers about 2–10, relatively large for the genus, light green to yellow-green, rarely white; dorsal sepal ovate, c. 12–17 mm long and c. 8–11 mm wide, acuminate, with 5–7 veins; lateral sepals oblique, reflexed, c. 18–22(–25) mm long and c. 6–9(–12) mm wide, strongly acuminate, with 7(–9) veins; petals bipartite, sometimes with an obtuse tooth in addition, the posterior lobe linear to narrowly elliptic, falcate, as long as the dorsal sepal and c. 2–4 mm wide, the anterior lobe narrower: c. 16–20(–25) mm long and c. 1.0–1.5 mm wide; lip tripartite, the undivided basal part c. 7–8 mm long and c. 2–3 mm wide, lateral lobes resembling the anterior lobes of the petals, c. 16–20 mm long and c. 1.0–1.5 mm wide, middle lobe c. 12–18 mm long and c. 1.5–2.0 mm wide; spur pendulous, filiform, ca. 14–22(–25) mm long and c. 1 mm thick increasing to c. 2 mm thick below the apex, largely hidden by the bract; anther-canals bent upwards, c. 7–8 mm long; stigma-lobes elongate, c. 7 mm long.

ssp. *ecalcarata* Snuverink & Westra ssp. nov.

A subspecies *longicauda* calcari carenti, praeterea labello usque ad basim tripartito bene distincta.

This subspecies differs from ssp. *longicauda* by the complete absence of a spur; moreover, the lip is divided immediately from the base. Inflorescence few- to several-flowered, with 5–16 flowers; dorsal sepal c. 16–19 mm long and c. 8–12 mm wide; lateral sepals c. 20–22 mm long and c. 6–9 mm wide; petals bipartite, sometimes with an obtuse tooth in addition, posterior lobe as long as the dorsal sepal, anterior lobe c. 21–33 mm long; lip tripartite immediately from the base,

lateral lobes c. 20–30 mm long, middle lobe c. 19–24 mm long; anther-canals c. 8 mm long; stigma-lobes c. 8 mm long. Fruit c. 38–52 mm long and c. 7–12 mm in diam., on a pedicel of c. 45–65 mm long.

TYPE. D. G. Geyskes 23 (holotype, U; isotypes, AMES, BBS, HB, K, MO, NY, P, VEN), Javaweg, Lelydorp, Suriname.

DISTRIBUTION. Suriname, Guyana and French Guyana; all collected in swamps and ditches.

SURINAME. Lavaweg, Lelydorp, D. G. Geyskes 23 (see type); between Hampton-court and Henarpolder, distr. Nickerie, J. Lanjouw & J. C. Lindeman 3192 (AMES, U); near Lelydorp, 25 km south of Paramaribo, J. C. Lindeman 5735 (U); Rijsdijkweg, distr. Para, Lindeman & Teunissen LBB 15225 (BBS); Coronie, Stahel 6849 (U); Granmanswampoe, distr. Saramacca, M. & P. Teunissen 1112 (BBS); Nanniswamp, near Kaaimanskreek, distr. Nickerie, M. & P. Teunissen 1255 (BBS, U).

GUYANA. Anarika, Grewal, Lall & Murgasen 404 (UG, U); C. A. S. Mon Repos, East Coast Demarara, S. G. Harrison 1367 (UG, K); Japacooma Lake, Jenman 1637 (UG); Hooroobea, Jenman 3802 (UG).

FRENCH GUYANA. Route de l'est, near Cayenne, Y. Veyret 1627 (P).

Exceptionally, individuals (or populations) are found in *Habenaria* without a spur or with a vestigial spur. See, for example, Dunsterville's drawing of *Habenaria schomburgkii* in G. C. K. Dunsterville and L. A. Garay: *Venezuelan Orchids*, Vol. 3: 138–139. (Andre Deutsch, London; 1965), where a vestigial spur is shown beside a normal one. In the case of *Habenaria longicauda* there is not only the complete absence of a spur, but also a different shape of the lip; in addition, spur-less plants tend to develop slightly more numerous and slightly larger flowers than plants with the normal spurred flowers. Moreover, the distribution pattern is striking: the spurred ssp. *longicauda* is most frequently encountered in Guyana, with some collections from eastern Suriname and French Guiana, whereas the spur-less ssp. *ecalcarata* is largely found in Suriname with a few collections from Guyana, and one from French Guiana. The two forms are not only morphologically, but also geographically different; this, in our view, fully warrants formal recognition on the subspecific level.

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