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A new taxon of *Habenaria* (Orchidaceae, Habenariinae) from Tahiti

M.Kras & H.B. Margońska*

Abstract

A new subspecies of ***Habenaria marquisensis*** NADEAUD (Orchidaceae, Habenariinae) from Tahiti (French Polynesia) is described, illustrated and compared to its closest relatives.

Key-words: French Polynesia; ***Habenaria***, Habenariinae, Orchidaceae; taxonomy.

Kurzfassung

Eine neue Unterart von ***Habenaria marquisensis*** NADEAUD wird von Tahiti (Polynesien) beschrieben und mit den nächstverwandten Taxa verglichen.

The genus *Habenaria* WILLD. is one of the largest genera of orchids in the world. This genus includes 2381 taxa (Index Kewensis 2008). Unfortunately, the species are not easily amenable to study. There are terrestrial plants with a terminal, many-flowered inflorescence. Flowers are green or white, sepals almost always have the same shape, petals are bipartite, the labellum is trilobed, the spur is long, and the most characteristic part of the flowers of *Habenaria* are the elongated processes of gynostemium like rostellophores, antherophores and stigamtophores. These features are sometimes not much distinct, so sometimes it is difficult to separate species.

Research in the French Polynesia orchid flora enabled us to work with materials deposited in numerous scientific institutions (among others: BISH, G, K, P, PAP).

We noticed some interesting things at these islands. *Habenaria tahitensis* NADEAUD is not an endemic species to Tahiti (MARGOŃSKA, KRAS & SAWICKA 2009). On the other hand, at Tahiti only *H. tahitensis* was recently reported. However, among collections from Tahiti, we found not only specimens of this species but also representatives of *H. marquisensis* F.BR. Despite of the presence of the most important distinguish features for *H. marquisensis* like the lanceolate and acute leaves, the subspicate inflorescence, the always undivided petals which are broadly ovate in outline, the spur being as long as the ovary and the pedicel, and the short gynostemium processes; the Tahitian plants show some specific differences compared to the type material of the species. We therefore decided to propose these plants as a new subspecies.

***Habenaria marquisensis* subsp. *hallei* KRAS & MARG., subsp.n.**

Folia in parte apicali pseudotuberi; inflorescentiae elongatae, laxe racemosae; petala

Marta Kras, Hanna B. Margońska, Departament of Plant Taxonomy and Nature Conservation, Gdańsk University, PL-80-441 Gdańsk, Al. Legionów 9, Poland. – dokhbm@univ.gda.pl

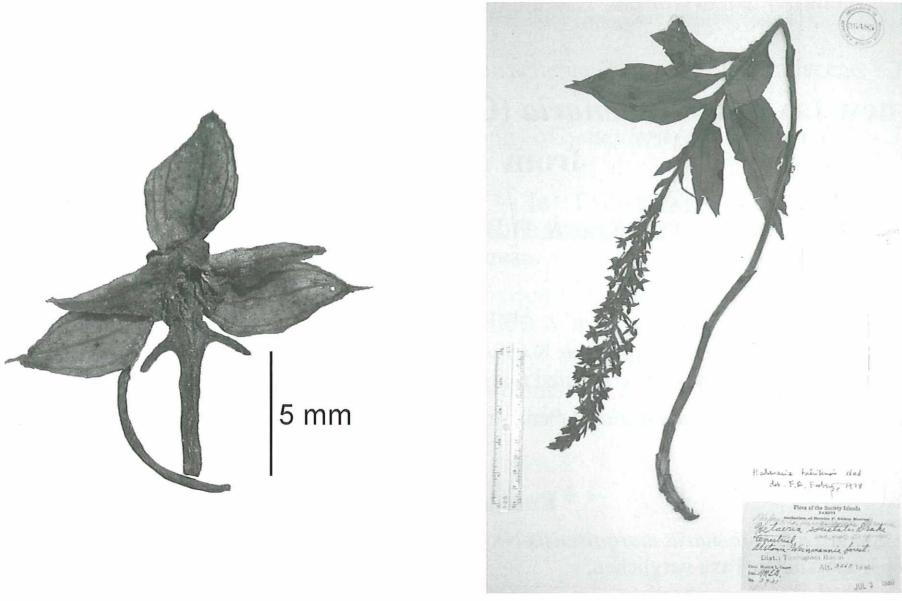

Fig. 1: Holotype of *Habenaria marquisensis* subsp. *hallei* KRAS & MARG., subsp.n. [M.L. Grant 3931, BISH]. (Photo H.B. Margońska).

facie *H. marquisensis*, integerrima; labellum trilobum, lobis lateralibus divergentibus, 1/2 totam longitudinem lobi intermedii formantibus.

Herb of ca. 50 cm height, leaves 7, in the apical portion of the stem, lanceolate, acute, ca. 12 cm long, ca. 3.5 cm wide, the upper ones diminishing to floral bracts; the lower part of the stem with several tubular sheaths; inflorescence terminal, elongate, racemose, many-flowered; flowers green; floral bracts lanceolate, acuminate; sepals ovate, 10 mm long, the upper one somewhat concave; petals entire, nearly as long as the sepals, ovate; labellum 3-lobed, linear, the lateral lobes shorter than the middle one, the maximum length of the lateral is half of the middle lobe; spur ca. 15 mm long; column short, the rostellum middle lobe broadly triangular-obtuse, the lateral lobes oblong; pollinia 2; caudicule filiform (Fig. 1).

Holotype: French Polynesia, Society Ilsands, Tahiti, Teahupoo Distr., Ronui, alt. 3260 feet, 3. 7. 1930 M.L. Grant 3931 (BISH 42094, isotype: BISH 36385).

Etymology: Dedicated to Dr. Nicolas Halle, remarkable French orchidologist, for his inspiration and assistance for our French Polynesia orchid studies.

H. marquisensis subsp. subsp. *hallei* (Fig. 1) is easily duistinguishable from *H. marquisensis* subsp. *marquisensis* (Fig. 2) by: leaves arranged in the apical part of the stem and upper leaves diminishing gradually to floral bracts, and the shape of the inflorescence. Generally the structures of the flower are almost the same. Only the proportion of the lateral lobes to the middle lobe of the lip are distinctly different. In *H. marquisensis* subsp. *hallei* the lateral lobes range to half the length of the middle lobe, whereas in *H. marquisensis* subsp. *marquisensis* these structures have the same length.

Fig. 2. The type of *Habenaria marquisensis* F. Br. subsp. *marquisensis,* holotype, Jones 1190 [BISH] (Photo H.B. Margońska), flower (BROWN 1931: pl. 17).

Because of the existence of the new subspecies at Tahiti, the biogeographic status of *H. marquisensis* as an endemic species of the Marquises Archipelago should be changed to an endemic species of French Polynesia.

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