

A new *Deiregyne* species (*Orchidaceae*, *Spiranthinae*) from Michoacan, Mexico

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Summary : *Deiregyne alinae* Szlach. is a new species from the Mexican State Michoacan. It is distinguished by its very dense and multiflowered inflorescence, its small flowers constricted above the ovary, its lip divided into two parts, with the hypochile very small and square and the epichile very large and almost orbicular. It is compared with *D. pyramidalis* (Lindl.) Balogh and *D. ramentacea* (Lindl.) Schlecht.

Résumé : Description de *Deiregyne alinae* Szlach., espèce nouvelle de l'état mexicain de Michoacan. Elle se distingue par ses inflorescences multiflores très denses, ses petites fleurs étranglées au-dessus de l'ovaire, le labelle divisé en deux parties, avec l'hypochile très petit et carré et l'épichile très grand et presque orbiculaire. Cette espèce est comparée avec *D. pyramidalis* (Lindl.) Balogh et *D. ramentacea* (Lindl.) Schlecht.

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The genus *Deiregyne* was described by SCHLECHTER in 1920, but unfortunately without indication of the generitype. This caused the essential differences of opinion in the concept of the genus (BURNS-BALOGH, 1982, 1986, 1988; CATLING, 1989; GARAY, 1982) and gave rise to the discussion on the subject of conformity with the protologue of the proposed lectotype, *Spiranthes hemichrea* Lindl. (BURNS-BALOGH, 1982) and *S. chloraeformis* A. Rich. & Gal. (GARAY, 1982). I have also presented my opinion on the matter (SZLACHETKO, in print). Comparing the two lectotypes with the diagnosis of the genus, I came to the conclusion that BURNS-BALOGH was right. Thus *Deiregyne* constitutes a genus characterised by the following features : floral and cauline bracts scarious ; flowers erect, usually with distinct ovary neck with adnate column foot ; lip with two fleshy auricles, free at the apices ; rostellum more or less ovate, the rostellum remnant obtuse or U-shaped ; viscidium oval.

On checking material from the subtribe *Spiranthinae*, I found specimens which differed distinctly from *Deiregyne* species previously known. Comparison of these with type specimens of other species confirmed my conviction that this is a new taxon.

***Deiregyne alinae* Szlach., sp. nov. — Fig. 1.**

Habitu Deiregyne pyramidalis affinis ; flores minores supra ovaris angustati floribus D. ramentaceae similibus. Epichilium aliquoties longius hypochilio, ovato-rotundatum, apice cucullatum.

Roots several, about 60-70 mm long, 5-6 mm in diameter, clustered, fleshy. Stem 620-690 mm tall, 6-7 mm in diameter at the base, 2-3 mm in diameter under the inflorescence, stout, erect, entirely glabrous or with sparsely glandular hairs along the inflorescence, completely

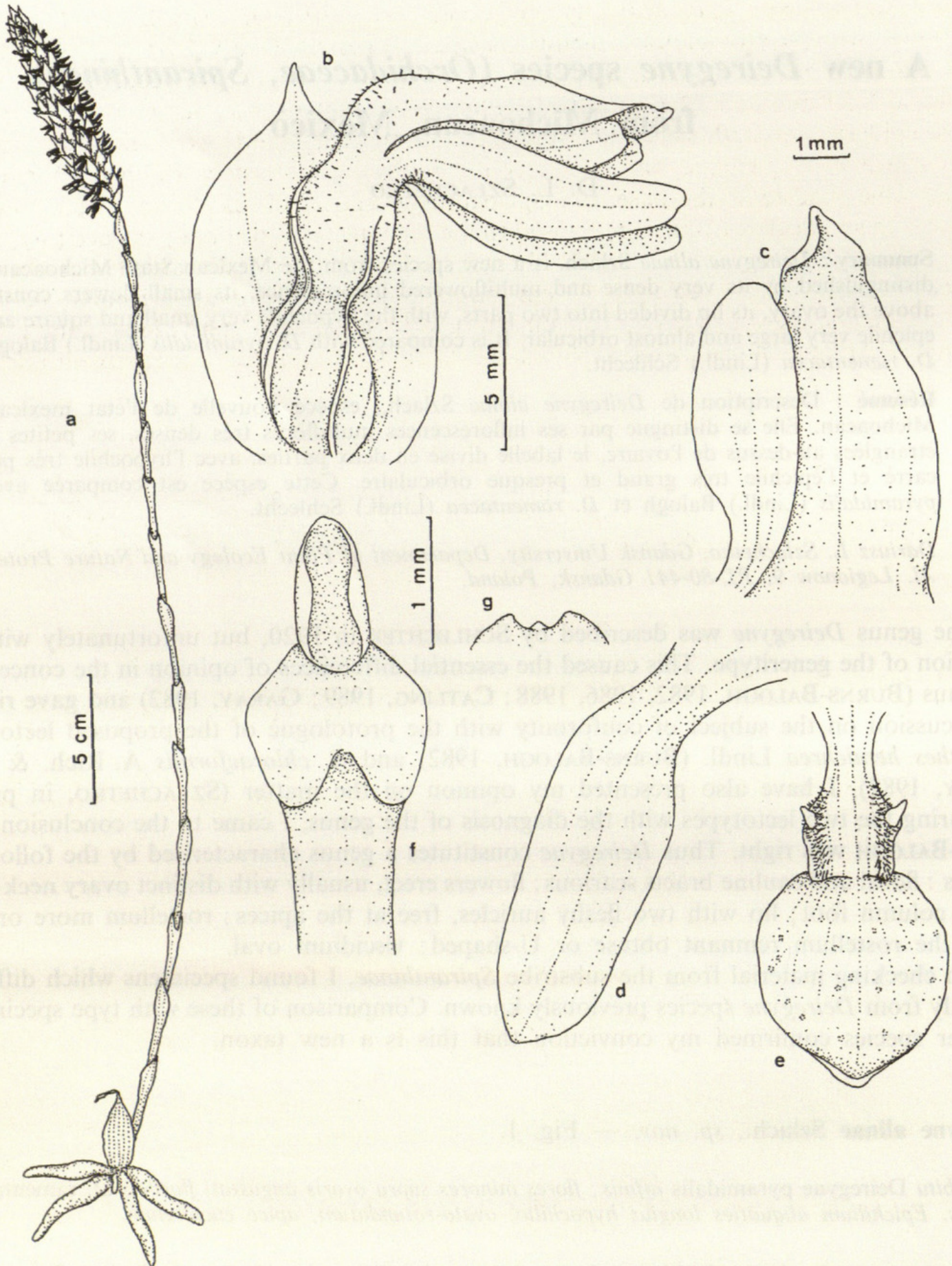


Fig. 1. — *Deiregyne alinae* Szlach. : **a**, habit; **b**, flower; **c**, dorsal sepal and petal; **d**, lateral sepal; **e**, lip; **f**, gynostemium, bottom view; **g**, rostellum remnant. (J. Santa Martinez 2037).

covered by scarious, semi-transparent cauline bracts. Leaves lacking at flowering time. Inflorescence 90-120 mm long, 40-60-flowered, dense, cylindrical. Flowers erect in lower part and horizontal in upper part, distinctly constricted above the ovary, small. Floral bracts 13-15 mm long, ovate, acute, scarious, semi-transparent, 3-nerved. Ovary 5.7-6 mm long, slightly twisted, glabrous or almost so. Sepals fused to one another forming the sepaline tube, white, dorsal sepal 8.5-9 mm long, 2.7-4 mm wide, elliptic- to oblong-ovate, acute, 3-nerved, with a papillose epidermis on both sides; lateral sepals 9-12 mm long, 3 mm wide, falcate at the base, broader above, oblong-elliptic, obtuse, 3-nerved, papillose on both sides. Petals 6-6.5 mm long, 2-2.7 mm wide, falcate at the base, oblong-spathulate above, obtuse to subacute, 3-nerved, papillose. Lip set on claw (2 mm long), fused to the sepaline tube, distinctly divided; hypochile 1-1.5 mm long, 2-2.6 mm wide, more or less square, with two fleshy auricles at the base, pubescent on the margins; epichile 4.2 mm long, 3.3-4 mm wide, ovate-orbicular, papillose, hooded at the apex. Gynostemium 3-3.5 mm long. Column foot 3-3.5 mm long, adnate to the ovary neck. Anther 1.8-2 mm long. Viscidium 1 mm long, elliptic to obovate-elliptic.

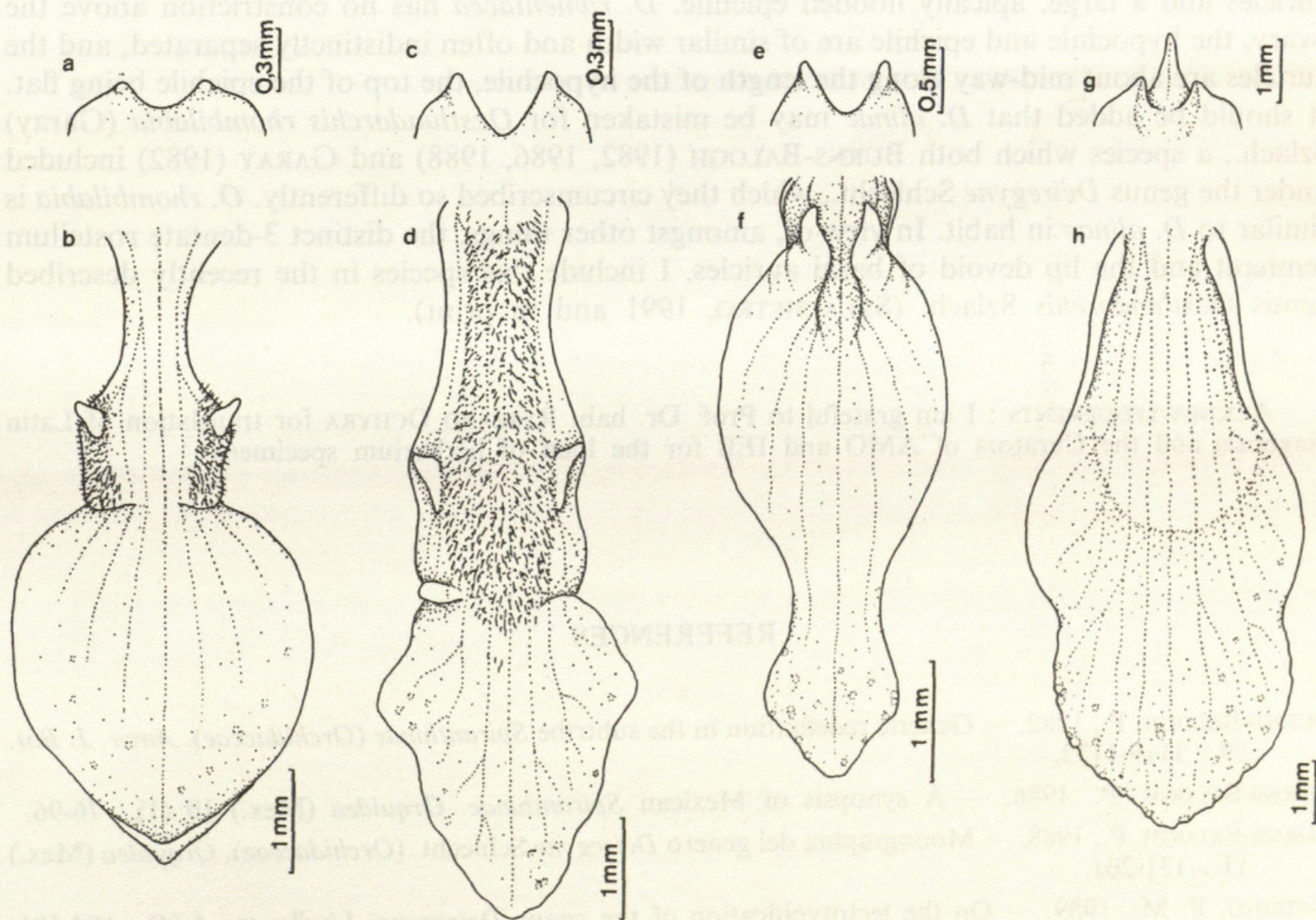


Fig. 2. — Comparison of the rostellum remnant (above) and lip form (below) between *Deiregyne alinae* Szlach. (a, b), *D. ramentacea* (Lindl.) Schlecht. (c, d), *D. pyramidalis* (Lindl.) Burns-Balogh (e, f) and *Oestlundorchis rhombilabia* (Garay) Szlach. (g, h).

TYPUS : *J. Santa Martinez 2037*, Mexico, Michoacan, Puerto de Los Lobos, al NE de la Hierbabuena, Municipio de Indaparapeo. Hab. bosque de encino, alt. 2400 m, 18 Apr 1987 (holo-, IEB).

PARATYPUS : *J. Santa Martinez 1339*, Mexico, Michoacan, municipio de Querendaro, cerro Zacaton, cerca de Milpillas. Bosque de *Quercus*, ladera de cerro, sobre penas, alt. 2800 m, 3 May 1986 (AMO).

Named after my wife, Alina, in gratitude for her patience and help during my work on the *Spiranthinae*.

In habit this species is similar to *Deiregyne pyramidalis* (Lindl.) Burns-Balogh; in both the inflorescence is dense, long, cylindrical, with numerous small flowers. The two differ distinctly, however, in the type of flowers and the form of the lip. In *D. pyramidalis* the ovary neck is very short and the undivided lip ovoid-lanceolate, whereas in *D. alinae*, the ovary neck is relatively long (cf. section *Deiregyne* after BURNS-BALOGH, 1988), and the lip is distinctly contracted in the center. As regards the structure of the flower and its parts, *D. alinae* is somewhat similar to *D. ramentacea* (Lindl.) Schlecht. The distinguishing features of the former species are: a distinct narrowing between the ovary and sepaline tube; a very small hypochile with basal auricles and a large, apically hooded epichile. *D. ramentacea* has no constriction above the ovary, the hypochile and epichile are of similar width and often indistinctly separated, and the auricles are about mid-way along the length of the hypochile, the top of the epichile being flat. It should be added that *D. alinae* may be mistaken for *Oestlundorchis rhombilabia* (Garay) Szlach., a species which both BURNS-BALOGH (1982, 1986, 1988) and GARAY (1982) included under the genus *Deiregyne* Schlecht., which they circumscribed so differently. *O. rhombilabia* is similar to *D. alinae* in habit. In view of, amongst other things, the distinct 3-dentate rostellum remnant and the lip devoid of basal auricles, I include this species in the recently described genus *Oestlundorchis* Szlach. (SZLACHETKO, 1991 and in print).

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