

*PHRAGMIPEDIUM KOVACHII*, A NEW SPECIES FROM PERU

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ABSTRACT. A new species from Peru, *Phragmipedium kovachii* in section *Micropetalum*, is described and illustrated.

*Key Words*: Orchidaceae, Peru, *Micropetalum*, *Phragmipedium kovachii*

While biologists marvel at the biodiversity of the ocean's depths, etc., striking novelties within relatively accessible lands continue to appear, surprisingly even among the most cherished plants. Until 1981, about a dozen mostly drab species of *Phragmipedium* Rolfe were known. Then, Libby Besse and her companions surprised us with a red lady-slipper (*P. besseae* Dodson & Kuhn), a color we thought not possible among the slipper orchids, let alone *Phragmipedium*! How could flies or bees pollinate these flowers, the only [then] known pollinators of slipper orchids? Dalström and Höijer observed visitation by a humming bird, perhaps the pollinator, opening the possibility of yet more surprising morphologies among species yet to be discovered. Then came the pure white miniature *Mexipedium xerophyticum* (Soto, Salazar & Hågsater) V.A. Albert & M.W. Chase (*Phragmipedium* in the broad sense) from Mexico with flowers that seem more appropriate on an *Angraecum* Bory.

Recently, Michael Kovach discovered a new *Phragmipedium* with large purple flowers in northeastern Peru (FIGURES 1, 2, & 4).

***Phragmipedium kovachii*** J.T. Atwood, Dalström, & Ric. Fernandez sp. nov. TYPE: Peru. Dept. Amazonas: ca. 2100 m elev., 5 June 2002, J. Michael Kovach s.n. (Holotype: USM)

FIGURE 3.

*Species haec Phragmipedium schlimii* (Linden & Rchb. f.) Rolfe *similis*, sed *floribus multimajoribus, petalis suborbicularibus proportione latioribus, labello inflato apice incurvatis differt.*

**Plant** a caespitose terrestrial, apparently not forming elongate rhizomes. **Roots** thick, to 4 mm in diameter. **Leaves** 3 or more basal distichous, lacking articulations, blades ligulate, according to collector notes to 64 x 4 cm, but mostly much smaller, rather thick and coriaceous, keeled beneath, sharply acute. **Inflorescence** ca. 23–25 cm tall, pubescent, purple, with a single green scape bract 7–9 cm long; ovary ca. 8 cm long, brown pubescent, subtended by an acute floral bract 4–5.5 cm long. **Flower** single per scape on the present specimen (2 possible according to the collector) 11 cm across (to 15 cm according to verbal reports); sepals greenish flushed and lined with reddish purple, petals reddish purple within, reddish purple without and white centrally; lip reddish purple, lighter within, with yellow margins; staminode purple with white apex. **Sepals** somewhat concave, densely golden-brown-pubescent without; dorsal 4.5 x 3 cm, broadly elliptic, obtuse; synsepal 5 x 3.7 cm, broadly elliptic to suborbicular, obtuse. **Petals** 6 x 4.8 cm, broadly elliptic, with somewhat recurved margins; **labellum** 5.5–7.5 x 3.5–4 cm, saccate with the apex turned up in front and the margin infolded, pubescent within at the base. **Staminode** 1.3 x 2 cm, convex, triangular to rhombic, anthers nearly touching the stigmas; stigmas three, the median

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stigma particularly large, ca. 1 cm long. Mature fruit unknown.

**Etymology.** Named for Michael Kovach of Goldvein, Virginia, discoverer of this species.

*Phragmipedium kovachii* is a member of section *Micropetalum* Hallier and differs from all other species in the genus by the huge flowers that range in color from pinkish to dark purple and that are apparently borne singly in a non-successively flowered inflorescence. The suborbicular petals are proportionally wide, and the lip is inflated with an incurved apex.



FIGURE 1. *Phragmipedium kovachii*; plant habit.

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FIGURE 2. *Phragmipedium kovachii*; flower size illustrated on hand.

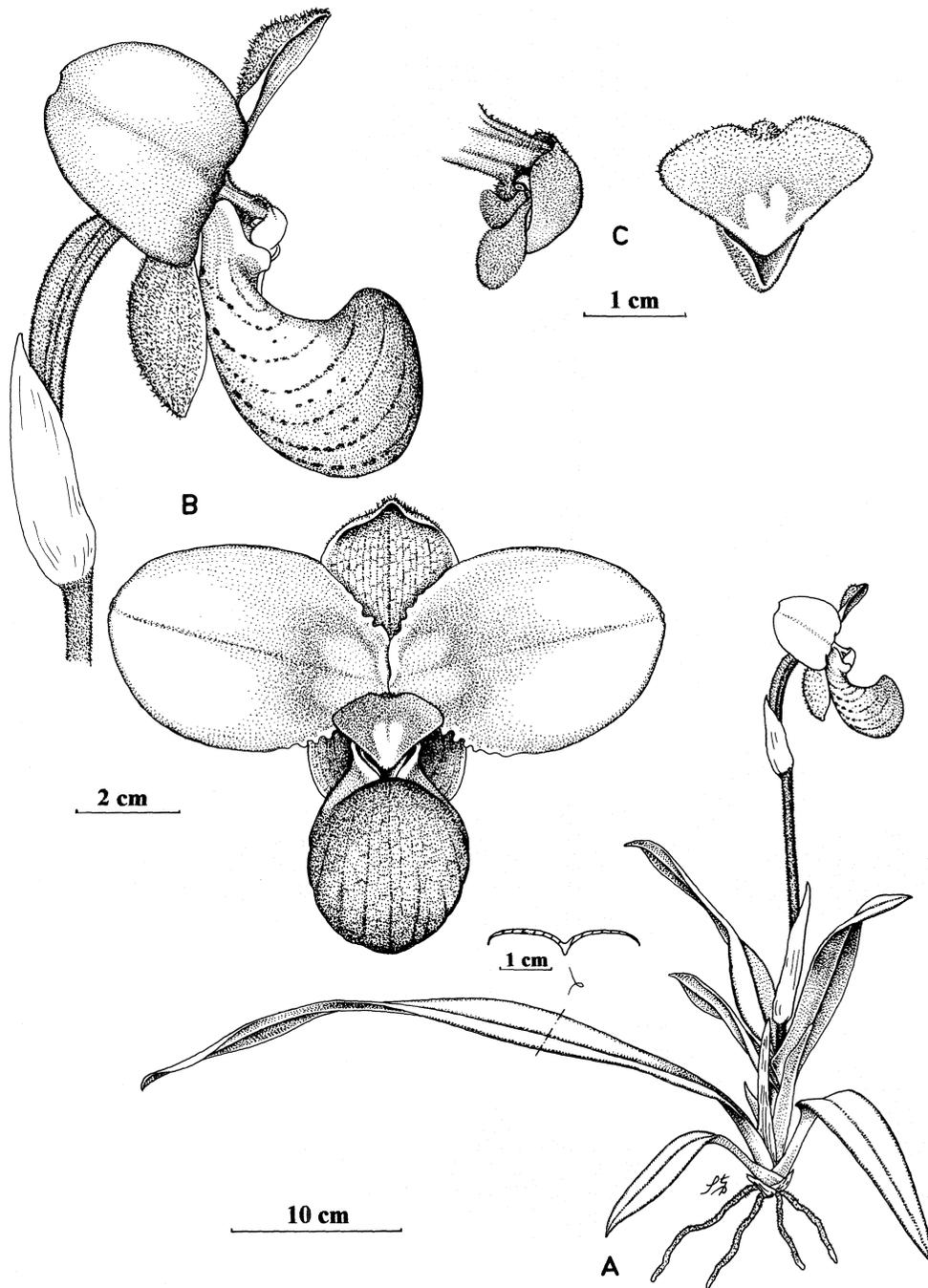


FIGURE 3. *Phragmipedium kovachii*. A. Plant habit with leaf cross section. B. Flower. C. Staminode lateral and front views.



FIGURE 4. *Phragmipedium kovachii*. From a watercolor painting by Stig Dalström.