

***Arthrosia freyi* Luer, sp. nov.**

Fig. 5.

Ety.: Named for Michel Frey who cultivates this species at Fazenda Capijuma in Espirito Santo.

Species haec *Arthrosiae floribundae* (Lindl.) Luer affinis, sed floribus majoribus, racemo erecto, petalis duplo latioribus, et labelli callis duobus longioribus sub apicem ad basim differt.

Plant medium in size, epiphytic, caespitose, roots slender. Ramicauls slender, indistinctly triquetrous above the middle, erect, 14-18 cm long, enclosed by a closely fitting, tubular sheath on the middle third and 1-2 sheaths at the base. **Leaf** erect, coriaceous, narrowly elliptical, subacute to acute, 5.5 cm long, 0.9-1 cm wide, narrowly cuneate below at the sessile base. **Inflorescence** an erect, subcongested, distichous, several-flowered raceme, 10-13 cm long including the peduncle 6-7 cm long, borne from the base of the leaf with a spathe 5-6 mm long; floral bracts 2 mm long; pedicel 1 mm long; ovary 3.5 mm long; **sepals** orangy-tan, glabrous, carinate, the dorsal sepal elliptical, subacute, 8 mm long, 3 mm wide, 3-veined, the lateral sepals connate to near the apex into an ovate, shallowly concave lamina, with the apex shortly bifid with acute tips, 8 mm long, 4.5 mm wide expanded, 6-veined; **petals** translucent, elliptical, obtuse, with slightly irregular margins, 3.5 mm long, 2.2 mm wide, with a single, dark purple vein; **lip** purple, elliptical-trilobed, 4 mm long, 2 mm wide expanded, rounded at the apex, with slightly irregular margins, the lobes above the middle, erect, antrorse, acute, the disc with a pair of longitudinal calli from below the apical margin to the callus at the base, the base with a thick, wedge-shaped callus that articulates with a cavity at the tip of the column-foot; **column** stout, longitudinally winged, 3.5 mm long, denticulate at the apex, the hooded anther, rostellum and stigma ventral, the foot thick, 2 mm long.

BRAZIL: Espirito Santo: forest near Fazenda Capijuma, alt. ca. 1200 m, where it was collected and cultivated, flowered in cultivation, 23 Nov. 2002, by *Michel Frey 057* (Holotype: HB), C. Luer illustr. 20252.

This species from Espirito Santo in southeastern Brazil is related to the widely distributed *Arthrosia floribunda* (Lindl.) Luer, but it is distinguished from the latter by larger flowers that are held upright in a longer, strict raceme. The sepals are a third larger, the petals are twice as broad, and the calli on the disc of the larger lip extend from near the apex to the base.

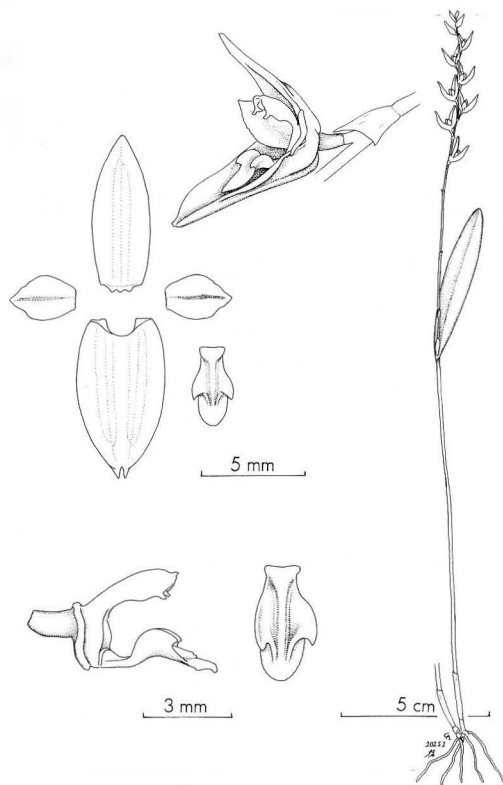


Fig. 5. *Arthrosia freyi*