Kefersteinia tinschertiana Pupulin sp. nov. TYPE: GUATEMALA. Suchitepéquez: Finca Santa Adelaida, Santa Bárbara, shade trees in coffee and cardamon plantations, 900 m, Oct. 1982, M. & M. Dix & D. Montúfar 6630 (Holotype, MO; Isotype: UVAL). Fig. 5.

Species Kefersteiniae microchariti Schltr. similis, labello obovato apice profunde bilobato, callo duabus laminis suberectis dolabriformibus formato, columna obscuris transversalibus carinis numerosis ornata differt.

**Plant** epiphytic, erect, cespitose, to about 14 cm tall, each shoot provided with 2-3 leaves and 2-3 acute, triangular bracts at the base. Roots flexuous, glabrous. Leaves narrowly lanceolate-elliptic, acuminate, to 12 cm long, 1.6 cm wide, narrowing at the base into a conduplicate petiole 1 cm long. Inflorescence a pendent, solitary flower; peduncle terete, slender, to 2.5 cm long, with 2 cucullate, widely ovate, subacute bracts. Floral bracts in pairs, cucullate, obtuse, membranaceous, to 3.5 mm long, about 3 mm wide, the inner one narrower. Ovary subclavate, 8 mm long including the pedicel. Flowers showy, the lip white translucent, the petals and sepals with maroon dots; the callus solid white with faint maroon dots at base. Dorsal sepal elliptic-lanceolate, obtuse, apiculate, concave toward the apex, 12 mm long, 5 mm wide. Lateral sepals elliptic to elliptic-lanceolate, acute, minutely apiculate, concave, the inner basal margin recurved, 13 mm long, 6 mm wide. **Petals** obliquely lanceolate, subacute, apiculate, 11 mm long, 5 mm wide. Lip subsessile, widely obovate-suborbic-

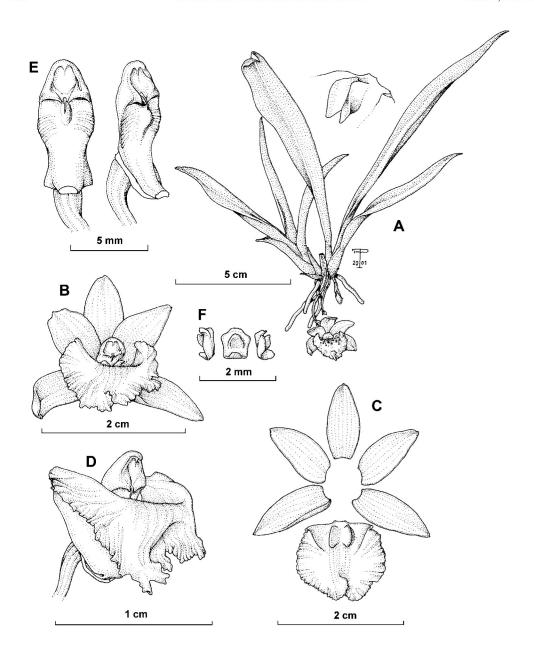


FIGURE 5. *Kefersteinia tinschertiana* Pupulin. A, habit; B, flower; C, perianth parts dissected; D, column and lip (three-quarters view); E, column (ventral and three-quarters views); F, stipe (lateral, ventral, and three-quarters views); G, callus. Drawn from the holotype.

ular, deeply bilobed at apex, concave toward the base, the apical half abruptly folding back, 13 mm long, 14 mm wide, the basal margins erect, then subcrenulate to apex; callus basal, bilobed, each lobe a flat, dolabriform, suberect lamina, sulcate along the middle, about 3 mm long, 3.5 mm wide. **Column** subterete, with a distinct foot, 9 mm long, 4 mm wide at the mid-

dle, from a narrow base, with inconspicuous, rounded wings, the ventral surface provided with multiseriate, transversal, low keels and a median, short, rounded, fleshy longitudinal keel. **Pollinia** 4, in 2 pairs of different size, on a short, obovate-subquadrate, obtuse stipe.

**Distribution:** Known only from Guatemala. **Ecology and phenology:** Epiphytic in shade

in premontane wet forest, Pacific slopes of the Sierra Madre at about 1000 m elevation. Flowering occurs at least in October.

**Eponymy:** Named in honor of Otto Tinschert, for his outstanding contributions to the orchidology of Guatemala.

Kefersteinia tinschertiana is a member of a Central American group related to K. lactea (Rchb.f.) Schltr. Its closest relatives are part of the mainly Andean complex of species associated with the type of the genus, K. graminea (Lindl.) Rchb.f., distinguished by the lamina of the lip folded back at the middle, and by the sessile, laminar callus. The presence in

Guatemala of a *Kefersteinia* species close to *K. lactea* was first recorded by Dix and Dix (2000) in their annotated checklist. However, the closest relative of *K. tinschertiana* in Mesoamerica is not *K. lactea* but *K. microcharis* Schltr. from Costa Rica, which presents a shortly bilobed lip, a column without prominent wings, as well as a short, fleshy, high keel under the stigma. *Kefersteinia tinschertiana* may be distinguished from *K. microcharis* by the obovate lip deeply bilobed at apex, the callus formed by two flat, dolabriform, suberect plates, and the multiseriate, low, transversal keels on the ventral surface of the column.