9. ***Kefersteinia lactea* (RCHB.f.) SCHLTR.**, Repert. Spec. Nov. Regni Veg. Beih. 19: 228 (1923); fig. 10.

≡ *Zygopetalum lacteum* RCHB.f., Gard. Chron. 1290 (1872).
≡ *Chondrorhyncha lactea* (RCHB.f.) L.O.WILLIAMS., Caldasia 5: 16 (1942).
Type: Costa Rica [?]. Chiriquí, cultivated by Linden (lectotype, selected here, W-R 49620!, a flower into a pocket and the drawing at top left of the type sheet).

[...]

Discussion: The interpretation of REICHENBACH's concept of *Zygopetalum lacteum* is somewhat difficult. The protologue is apparently based on four collections REICHENBACH received at different times, namely a collection from Chiriquí by WALLIS, a Costa Rican

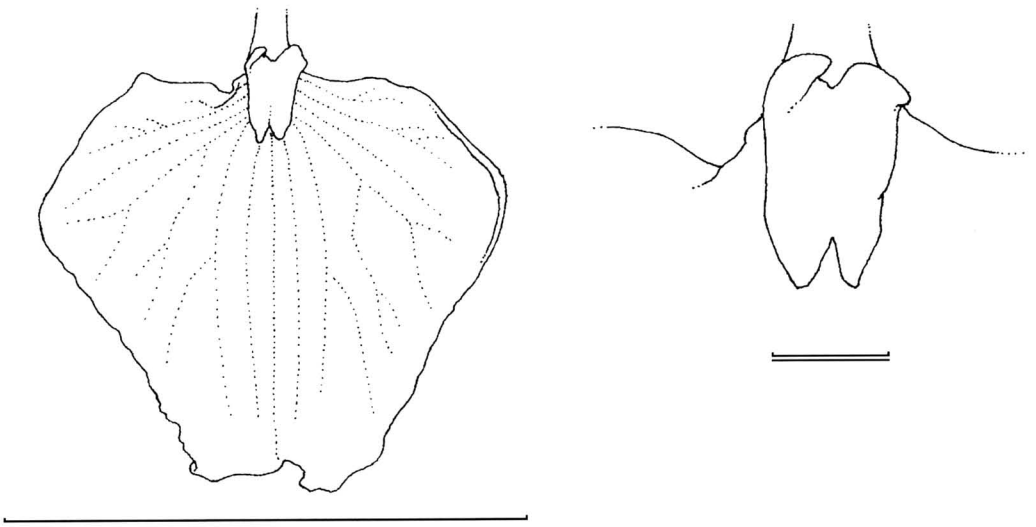

Fig. 11: *Kefersteinia lactea*. Lip and callus from the flower of the lectotype of *Zygopetalum lacteum* RCHB.f. Illustration voucher: Chiriquí, without collector (W-R). Bar = 1 cm. Double bar = 1 mm. Drawn from the type.

collection by ENDRES, a specimen cultivated by LINDEN from Chiriquí and another cultivated specimen, without definite locality, flowered by Veitch (Reichenbach, 1872). Seemingly, REICHENBACH planned to publish the new species after correspondence with A.R. ENDRES, who sent him his different sketches and tentative descriptions based on Costa Rican collections done around 1868 (W-R 44590!, 14705!, 33240!) with the proposed name of "*Zygopetalum lacteum* ENDR. & RCHB.f". Although the manuscript protologue by REICHENBACH expressly indicates the co-authorship of the new species with ENDRES, the name of the collector was eventually deleted before publication. The type material of *Zygopetalum lacteum* kept in Vienna well reflects the wide concept REICHENBACH had of this species. The type sheet (W-R 49620!) consists of three sketches of different flowers and a single flower in a packet. The drawing accompanying the original description shows an elliptic column, whereas both the drawings from Endres 334 and from a specimen collected in Chiriquí (supposedly drawn from a plant flowered by LINDEN, as indicated by a leaflet at the bottom right of the type sheet in REICHENBACH's handwriting) on the same sheet present triangular wings above the middle of the column that seem to met better the protologue ("columna medio dilatata, nunc angulata"). The outline of the lip is suborbicular in the drawing accompanying the manuscript protologue, it is obovate-subtrilobate in Endres 334, and widely ovate in the Chiriquí specimen. Also the shape of the lip callus, that has been considered critical to distinguish species in the so-called *K. lactea* complex, is rather variable in the material associated with the type. Two of the specimens apparently present a callus wider in the frontal portion, a character used by DRESSLER (1993) to separate *K. lactea* from its relatives, but in the only flower conserved with the type material the callus is lyre-shaped and it presents at the base the two triangular lobes that probably correspond to the "laciniae" cited in the original protologue (fig. 11). The same is true for two other specimens

at W collected by ENDRES in Costa Rica (W-R 14705! and W-R 44599!), both of which were determined by REICHENBACH as *Zygopetalum lacteum*. Although ATWOOD (1989) noted that a drawing of a flower from a paratype of *K. lactea* (Endres 334) kept at the herbarium of OAKES AMES (AMES 21763, photo!) does not show the wings of the column, the tracings made by SCHLECHTER under the label Endres 334 mixed up the sketches of two different specimens studied by REICHENBACH. Actually, Endres 334 clearly shows both the small wings at the middle of the column and the abaxial keel.

The resolution of the true identity of *Zygopetalum lacteum* is particularly critical because this is the oldest name published in the *Kefersteinia lactea* complex, and firm application of names to the other Mesoamerican taxa of this group closely depends on typification of REICHENBACH's concept. No one of the flower and sketches of the paratypes of *Z. lacteum* at W totally agrees with the protologue for one or more characters, and paradoxically the sketch REICHENBACH traced on the same leaflet of the manuscript description is the least close to the protologue, presenting no wings on the column nor triangular lobes at the base of the lip. Accepting this drawing as the type of *Z. lacteum* would have as consequences the reduction of *Kefersteinia microcharis* SCHLTR. in synonymy under *K. lactea* and the necessity to publish a new name for the material commonly collected and cultivated in Costa Rica and Panama under the name *K. lactea*. For this reason I propose to typify *Zygopetalum lacteum* RCHB.f. choosing as the lectotype for this species the only preserved flower on the type sheet and REICHENBACH's sketch at top left of the same sheet, likely representing the same flower: Chiriquí, without collector, flowered in cultivation by LINDEN. The lectotype substantially agrees with the protologue, with the exception of the lip outline, and closely matches other Costa Rican collections determined by REICHENBACH himself as *Z. lacteum*.