

# ICONES PLANTARUM SUCCULENTARUM

## 4. *Adromischus alveolatus* P. C. Hutchison-1

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[Now, this species is *Adromischus marianiae* 'Alveolatus']

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Among many collections of *Adromischus* received from South Africa in the past few years was one of a new species related to *A. herrei* (Barker) Poellnitz, collected in 1952 by Harry Hall of the National Botanic Garden, Kirstenbosch. South Africa. *A. herrei* has been collected in Namaqualand in a restricted area west of Springbok, from the Buffelsrivier north to the road between Anenous anti Port Nolloth. The type of this new species, on the other hand, was collected about 20 miles north of Springbok and 8 miles north of Concordia on the road to Good-house. In 1956 Hall revisited this locality and collected four plants of it which he forwarded to me, together with the following notes.

"It was in fissures of granite, over an almost bald sloping rock face, with very little other vegetation. A species of fern shared the same small cracks. Where the soil was better grew *Euphorbia dregeana*, *Ruschia frutescens*, *R. albiflora*, *Othonna euphorbioides*, *Senecio cephalophora* and on shallow levels of soil and grit grew *Conophytum pellucidum*. These smooth granite slopes rise from the plains which are, of course, deep, loose sand and the vegetation is usually quite dissimilar from that of the rocks."

The description and the holotype are prepared from a single specimen of the 1952 collection (Our number 54.116-1) which flowered under glass this year.

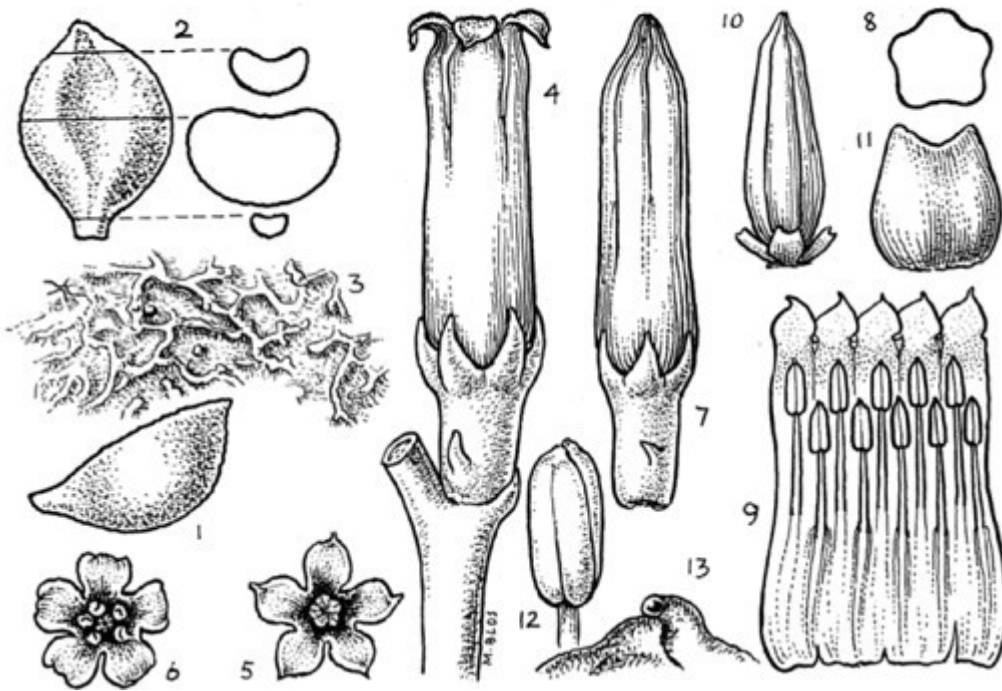


Fig. 151. *Adromischus alveolatus* Hutchis., the clonotype, U.C.B.G. 5.1.116-1. 1. Leaf, side view. 2. Leaf, top view and cross-sections. 3. Epidermis. 4. Flower. 5. Perianth limb, spreading. 6. Perianth limb, fully expanded. 7. Bud. 8. Cross-section perianth tube at midpoint. 9. Stamen insertion. 10. Carpels. 11. Nectary scale. 12. Anther. 13. Anther apex. 1, 2, nat. size. 3, greatly enlarged. 4-10, x 3. 11, 12, x 9. 13, greatly enlarged. Drawings by Mrs. M. Blos

### *Adromischus alveolatus* P. C. Hutchison, sp. Nov.

Plantae nanae. caules 1-2 cm. longi; folia surosulata petiolata symmetrica rotunda ad obovata, supra late leviter canaliculata, subtus convexa, longiora quam latiora, usque ad 3.5 cm. longa 2 cm. lata et 12 mm. crassa, apica non vel vix marginata, superficie omnino aspera, saepe alveolata; flores usque ad 15 erecti singuli; pedicelli usque ad 7 mm. longi pulverulenti; tubus perianthii glaucus, basi flavescens, supra viridis, apice fusco-ruber, intus laete viridis, in fauce papillosus, apice constrictus; lobi limbi perianthii patentes et apice recurvati, obovati acuti, 2 mm. longi latique, pallide fusco-rubri, dimidia parte fuscores vel solum in una margine fuscores, demum pallescentes, intus concolori-muriculati; styli abrupte angustati; squamae nectariferae luteae ca. 1.7 mm. longae lataeque, lateribus rotundatae, ad apice paullo angustatae, apice ipso late leviter vel profunde retusae.

### Description:

- **Roots** tuberous.
- **Stem** erect, 1 to 2 cm. long, up to 5 mm. in diam., pale tan-green or yellow-green, sometimes whitish, rugose.
- **Leaves** sub-opposite to subsulcate, horizontal to erect, usually symmetrical, shortly petiolate, rotund to obovate or lanceolate, longer than broad, up to 3.5 cm. long and 2.0 cm. wide and 12 mm, thick, convex on the lower face, broadly and shallowly canaliculate on the upper face, whitish green, unspotted, the epidermis roughened, often alveolate, sometimes with small tubercles, the apical margin sometimes obscurely thickened, the apex often subacute.
- **Inflorescence** simple; peduncle up to 17 cm. long, up to 2.5 mm. thick, glaucous, sometimes zig-zag, lower 4 cm. with ca. 5 thick, deltoid, pulverulent sterile bracts 1 + mm. wide and 2

mm. long; rachis 10 to 15 cm. long; flowers up to 15, erect, single, usually spirally arranged about 1 cm. apart, occasionally more crowded to almost opposite.

- **Pedicels** pulverulent, white, 4 to 7 mm, long, 2 to 3 mm. thick.
- **Calyx** lobes deltoid, acute, pulverulent, white, ca. 3 mm. long and 2 mm. wide.
- **Perianth tube** glaucous, yellowish at base, green above, maroon at apex, bright green inside, 15 mm. long, 5 mm. in diam. at base, 4.5 mm. in diam. slightly above mid-point, then barely inflated, constricted just below mouth to 4 mm, in diam., the cross-section at mid-point pentagonal with broadly concave sinuses and convex ridges, the sinuses deeply incised for 3 to 4 mm. from the tube-mouth, then grooved to mid-tube, below there obscure, the tube-throat conspicuously and densely papillose, the papillae large, green, translucent, abruptly absent at the basal limits of the limb; limb-lobes spreading then recurved, ovate, acute, 2 mm. long and broad, pale whitish maroon with one margin or one-half darker, later fading, the inner surface concolorously muriculate, these minute papillae smaller and obscure at the margins.
- **Stamen** filaments biseriate at about mid-tube, ca. 5 mm. long, those of the lower series barely broader, those of the upper series barely longer, green, muriculate below; anthers included, oblong, creamy yellow, the terminal translucent globule not stalked, obsolescent, the anther apices irregular.
- **Carpels** 10 to 11 mm. long, green, smooth, subulate, the styles abruptly narrowing, pale yellowish green, the stigmas unenlarged, included.
- **Nectary scales** ca. 1.7 mm. long and broad, the sides flaring, the apex narrowed, shallowly or deeply retuse, yellow.



FIG. 150. *Adromischus alveolatus* Hutchis., the clonotype, U.C.B.G. 54.116-1, ca. x 0.8

**South Africa:**

Namaqualand, 8 miles north of Concordia on the road to Goodhouse, leg. H. Hall, ex hort. University of California Botanical Garden 54.116-1 (BOL-Holotype, UC-Clonotype).

54.116-1, the clonotype, as well as four plants of 56.709 from the same locality are in cultivation here.

In *Adromischus herrei* (Barker) Poellnitz, the leaves are more acute, generally less robust, and the epidermis is brownish flecked with grey-white and minute spots of red, and it is coarsely roughened or tuberculate. *A. alveolatus* differs in its leaf color, leaf shape and especially in the epidermal characters. Tubercles are formed occasionally, and very often these run together to form minute and irregularly reticulate, low, rounded ridges. The flowers of the two species differ completely and will be compared in detail when the new section, to which these species belong, is described.

Culture for this new species and for those related to it seems to offer no particular problems. They prefer small pots, excellent drainage, and strong light. They will not tolerate over-watering.