

A NEW *PULICARIA* FROM SOUTHERN YEMEN

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Pulicaria hadramautica Gamal-Eldin & Boulos (Asteraceae, Inuleae), a new species belonging to sect. *Platychaete* is described and illustrated from S Sayun, Republic of Yemen.

In the monograph of the genus *Pulicaria*, five new species were described from the Southern regions of the Arabian peninsula (Gamal-Eldin, 1981). Recently, due to active exploration in almost all the countries of the region, two new *Pulicaria* species and a new subspecies from Oman, namely *P. edmondsonii* Gamal-Eldin (1984), *P. pulvinata* and *P. omanensis* subsp. *milleri* Gamal-Eldin (1986), have been described. This shows that the flora of the Southern region, especially the flora of the Southern region of Yemen and Oman is still in need of further collection trips.

At the end of 1987, Prof. Boulos and others had the opportunity to collect plants from South Yemen. From their gatherings, two *Pulicaria* specimens were kindly put at my disposal for determination or description. The study of this material led to the recognition of a new species from Southern Yemen (Sy). The other specimen (Boulos *et al.* 1999) has been identified as *P. nivea* O. Schwartz, which was originally described from South Yemen. Thus, the total number of *Pulicaria* species in the Arabian peninsula has risen to 28 taxa, belonging to 26 species.

The new species shows affinity to sect. *Platychaete* in habitat and achenes with typical plumose pappus, but the involucre, leaf form and even the glands and hairs on the tips of the disc flowers are similar to those of sect. *Pulicaria*. Similar affinities are present not only between the sections of the genus *Pulicaria*: a close relationship between *P. somalensis* O. Hoffm. subsp. *schweinfurthii* Gamal-Eldin with *Pulchea arabica* was recently given (Qaiser & Lack, 1986).

***Pulicaria hadramautica* Gamal-Eldin & Boulos, sp.nov. Fig. 1.**

Planta perennis basi valde lignosa, ad 10–20 cm a basi ramosa, ramis caulem primarium superantibus. Folia basalia florendi tempore emarcida. Caulina omnia similia, oblanceolata, c.25–50mm longa x 5–7mm lata, basi in petiolum attenuata vel superiora sessilia, c.15–20mm longa x 2.5–5mm lata, integra vel minute et remote denticulata, rarius basin versus utrinque 2–7 dentis provisa, superiora minora. Folia tomentosa et dense glandulis. Capitula heterogama in apice ramourum solitaria. Involucrum c.4.5–5mm altum; phylla involucri omnia anguste linearia, inaequalia, 3-seriata, laxe imbricata et acuta; exteriora herbacea, c.2.5–3 x 0.3mm, tomentosa, dense glandulosa; media et interiora in parte media herbacea, scariosa marginata, c.5–7 x 0.7mm. Flores lutei, marginales pauci,

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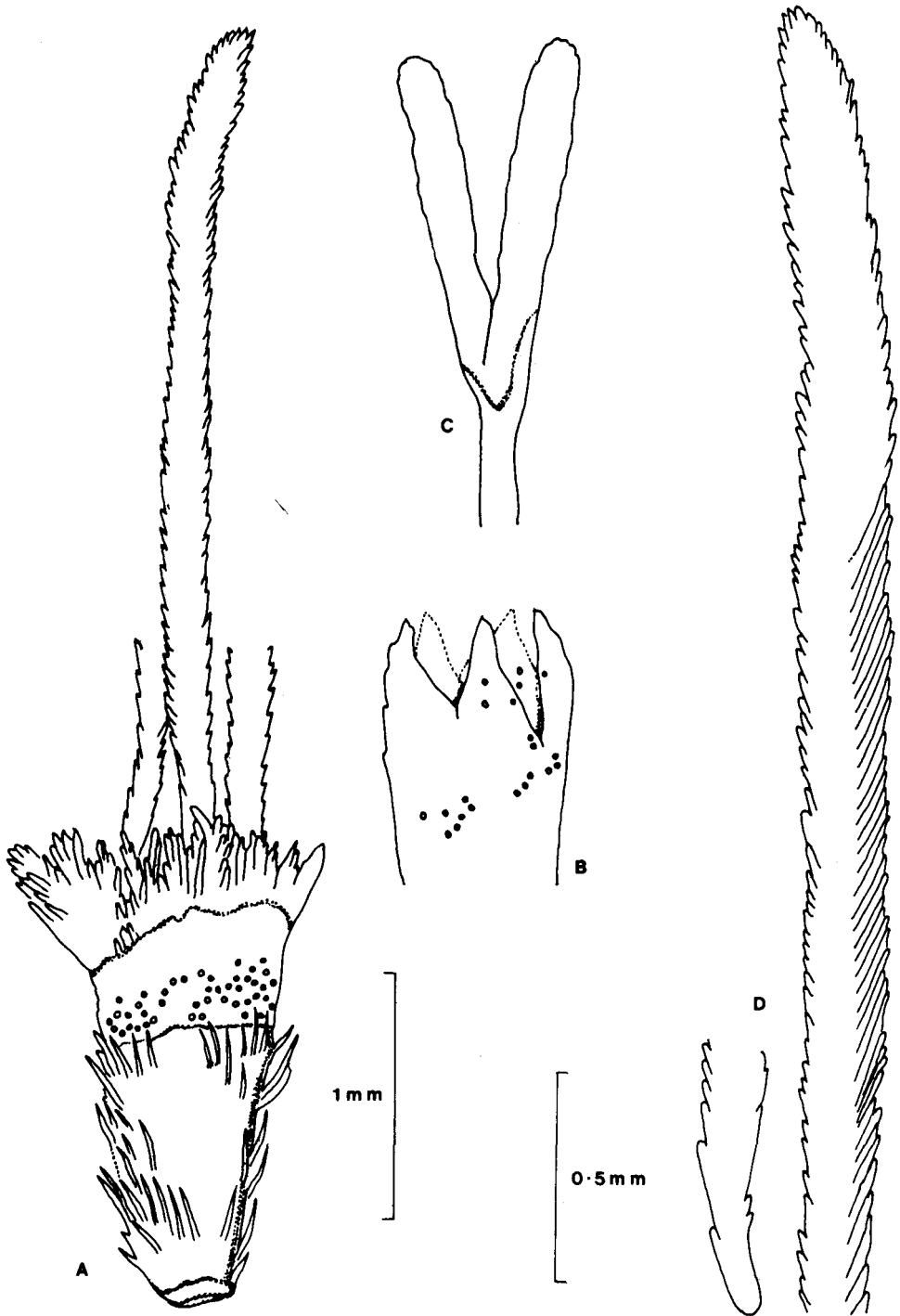


FIG. 1. *Pulicaria hadramautica*. A, achene with pappus; B, upper portion of corolla of disc flower; C, style branches; D, single hair of the inner pappus.

radiantes, foeminei, ligulati. Flores disci hermaphroditi c.4.5mm longi, tubulosi, superne in laciniis sparse glandulosi et pilis. Achaenia cylindrica c.1.7mm longa, superne et inferiora pilis brevibus obsita, indistincta costata. pappus duplex, externus coroniformis, c.0.5–0.6mm longus, corona apice dentata, e setis c.14, 2.8–3mm longis. Setae basi laeves, superne margine plumosae, dentibus sensim elongatis et connatis. Type: Republic of Yemen [South Yemen], Hadramaut; central plateau, 215km S Sayun, along the road to Al-Mukalla, calcareous slopes, alt. 1480m, 16 vi 1987, L. Boulos, A.K. Rowaished, A.N. Gifri, W.A. Saeed & M.A. Hussein 17076 (holo. KTUH; iso. in Herb. Suez canal University, Ismailia).

P. hadramautica can be easily distinguished from the other species of sect. *Platychaete* through the lax involucre bracts, the tomentose indumentum and the typical plumose pappus, especially from *P. omanensis* Gamal-Eldin with pilose indumentum. In habitat, the new species has a superficial similarity to *P. attenuata* Hutch & Burtt and *P. guestii* Rech. f. & Rawi, from sect. *Pulicaria*. *P. attenuata* is known only from Sudan, whereas *P. guestii* has a restricted geographical distribution to Kuwait, the southern desert in Iraq and Iran (Rechinger, 1980) and in the eastern province in Saudi Arabia (Gamal-Eldin, 1981).

We are grateful to Prof. Dr Hedje for careful editing of the manuscript.

REFERENCES

- GAMAL-ELDIN, E. (1981). Revision der Gattung *Pulicaria* (Compositae-Inuleae) für Afrika, Makaronesien und Arabien. *Phanerogamarum Monographiae* 14. Vaduz.
- GAMAL-ELDIN, E. (1984). Studies in the Flora of Arabia VIII. A new *Pulicaria* from Oman. *Notes RBG Edinb.* 41:467–471.
- GAMAL-ELDIN, E. (1986). Studies in the Flora of Arabia XVII. Further new and interesting taxa of *Pulicaria* from Oman. *Notes RBG Edinb.* 43:481–488.
- RECHINGER, K. H. (1980). *Platychaete*. In *Flora Iranica* 145:121–125.
- KAISER, M. & LACK, H. W. (1986). A note on *Pluchea arabica* (Asteraceae, Inuleae). *Willdenowia* 15:451–454.