

ROBERT VOGT

Rhodanthemum laouense* (Compositae, Anthemideae), a new species from Morocco*Abstract**

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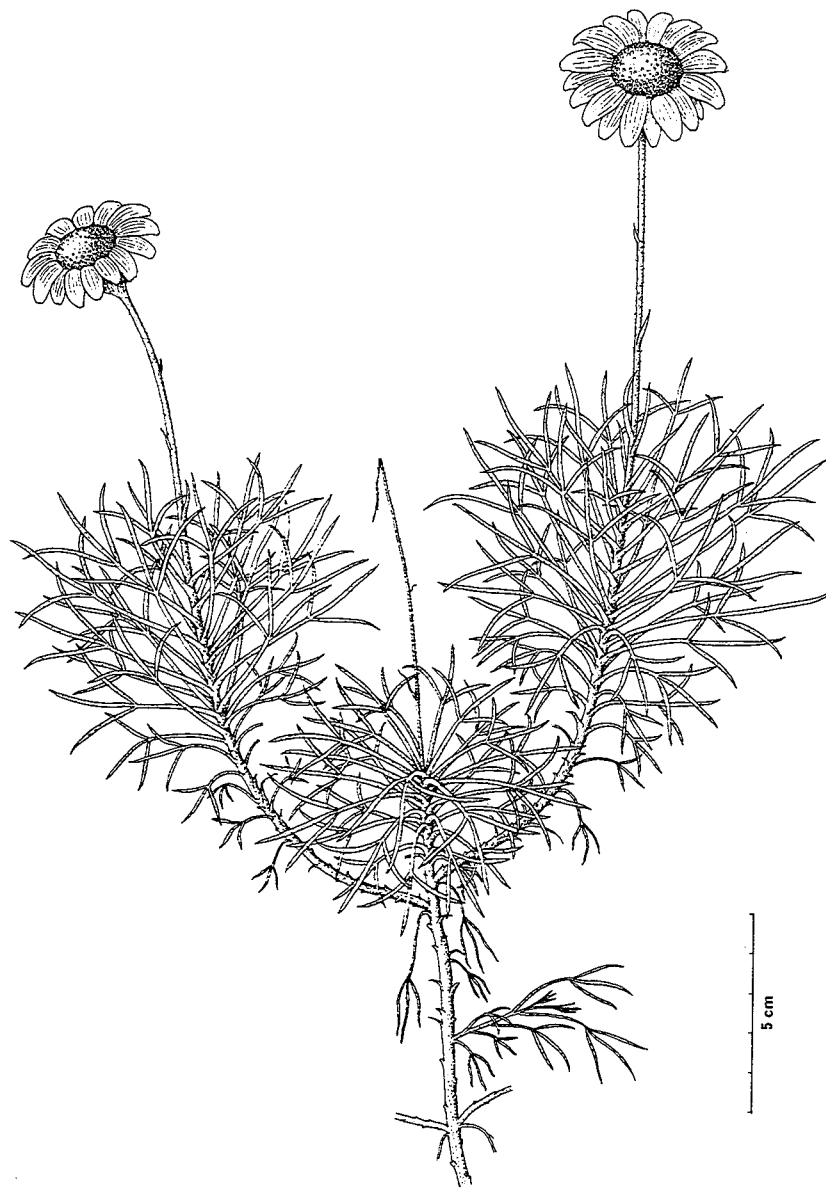
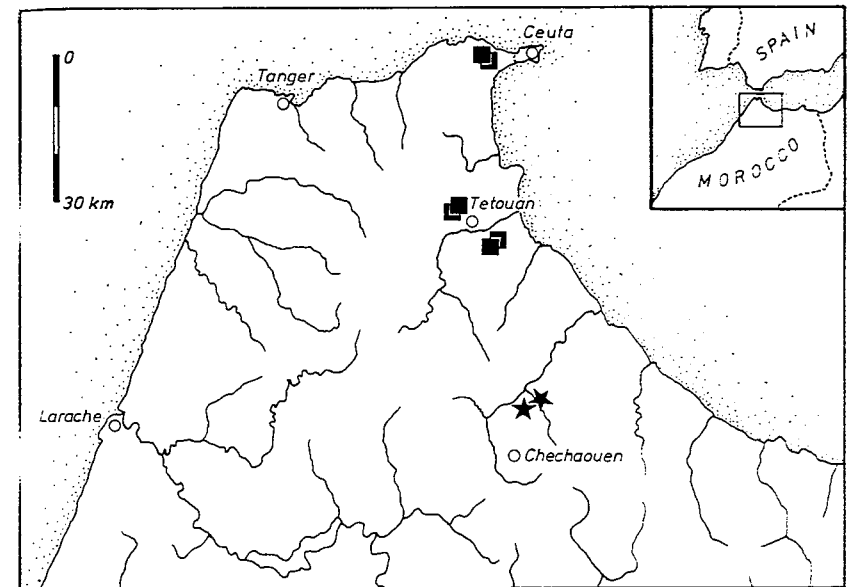
Rhodanthemum laouense is described as a species new to science. A detailed description, illustrations, a distribution map, as well as cytological data are provided and the affinities of this narrow endemic are discussed.

Rhodanthemum has recently been established by Bremer & Humphries (1993), allegedly based on a section of *Leucanthemum* described by Vogt (1991) but technically, due to procedural inadequacies, as the name of a new genus *Rhodanthemum* Wilcox, Bremer & Humphries, not (Vogt) Bremer & Humphries as intended. A monographic study of *Rhodanthemum* by Vogt & Oberprieler is in preparation and will include a comprehensive discussion of its taxonomic position. As a by-product a new species has been identified and is described here.

Rhodanthemum laouense Vogt, spec. nova – Fig. 1, 3.

Type: Morocco, western Rif mountains, Oued Laou, limestone cliffs near the village Tagzout Bani Hasan, 5,3 km NE of the reservoir of Oued Laou, 1,2 km NE of the bridge over Oued Laou along the road between Chefchaouene and El-Tleta-de Oued-Laou, 350 m, 35°16'N, 5°15'W, 22. 4. 1993, R. Vogt 10065 & C. Oberprieler 4513 (holo- B; iso- RAB, SEV, herb. Oberprieler, herb. Vogt).

Planta perennis, herbacea, basi suffrutescens. Caudex lignosus, ramosus ramis elongatis lignosis vestigiis foliorum emarcescentium vestitis vel nudis griseo-brunneis, nonnullis rosulas steriles gerentibus, aliis in caules floriferos abeuntibus. Caules floriferi e centro rosularum fertilium orientes herbacei, usque 12 cm alti, inferne dense foliati, superne nudi vel 1–2-bracteolati, monocephali, pilis medifixis appressis dense obsiti. Folia virentia, dense et appresse pilosa (tandem glabrescentia) pilis medifixis, basi in petiolum ad 2,5 cm longum

Fig. 1. *Rhodanthemum laouense* – Habit.Fig. 2. Distribution of *Rhodanthemum laouense* (stars) and *R. hosmariense* (squares) in N Morocco according to revised material.

attenuata, ad medium tripartita, divisionibus omnibus integris vel bifidis, linearibus, apice acutiusculis, margine leviter reolutis. Pedunculi nudi, anguloso-striati, dense pilosi. Capitula cum ligulis 2,5–4 cm diametro. Involucrum obconicum; phylla imbricata, indistincte 4–5-seriata, herbacea, leviter appresse pilosa, pilis medifixis; exteriora breviora, triangulari-ovata, late fusco- et scarioso-marginata; media anguste oblonga, apice rotundata vel acutiuscula, 5–8,5 mm longa et c. 2 mm lata, fusco-marginata, margine supra medium late lacerato-scariosa; interiora diminuta, anguste obovata vel oblonga, glabra, supra medium fusco- et scarioso-marginata. Receptaculum conspicue convexum, glabrum. Flores heteromorphi; flores marginales feminei, ligulati, ligula alba, anguste elliptica vel oblonga, apice minute tridentata, 15–16 mm longa et 4–5 mm lata; tubo 1–2 mm longo, lateraliter angustissime alato; centrales tubulosi, lutei, hermaphroditi, corolla 3,5–4 mm longa, 5-lobata. Achaenia omnia subconformia, anguste obovoidea vel plus minusve cylindracea, recta vel leviter arcuata, 3–3,5 mm longa (pappo 1–3 mm longo excluso), 10-costata, alis albidis acie e cellulis myxogenis constante, valleculis vitta atro-rufa lata percursis. Pappus evolutus, achaeniorum disci et radii conformis, membranaceus, obliquus, latere adaxiali protractus, 1–3 mm longus, plus minusve eroso-crenatus, albidus.

A Januario ad martio mensibus florens.

Chromosomatum numerus: $2n = 18$

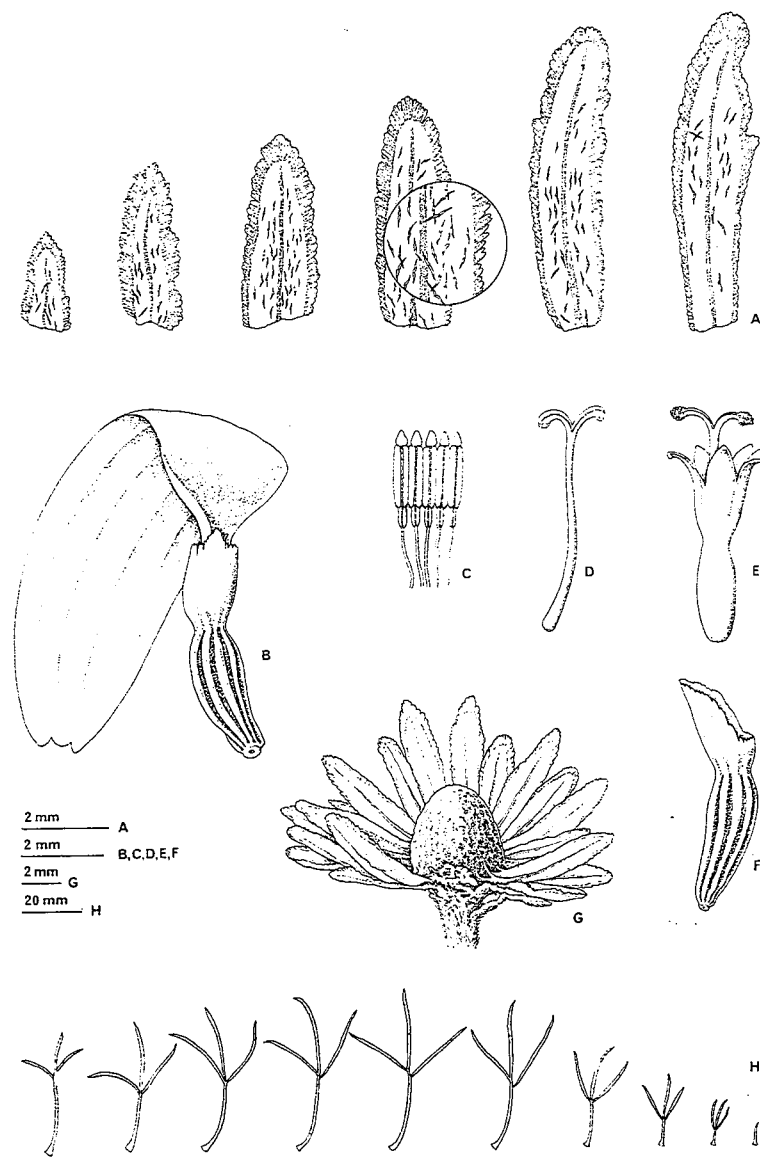


Fig. 3. *Rhodanthemum laouense* – A: Involucral bracts, from outermost to innermost; B: Outer ligulate flower; C: Anther tube, opened; D: Style; E: Inner flower; F: Cypsela of inner flower, lateral view; G: Receptacle; H: Leaves, from basis to peduncle.



Fig. 4. *Rhodanthemum laouense* – Metaphase of root-tip mitosis (Vogt 10065), $2n = 18$. – Scale: 10 μ m.

The new species has hitherto been confused with *Rhodanthemum hosmariense* (Ball) Wilcox, Bremer & Humphries also growing in the western Rif mountains. *Rhodanthemum laouense* is only known from a small area N of Chefchaouen (Xaouen), while *R. hosmariense* is more frequent and occurs in the mountains between Ceuta and Tetouan (Fig. 3). The two species can be easily distinguished by leaf shape and outline, and bract indumentum. The leaves of *R. laouense* are larger and less divided, the involucral bracts are less rounded at the apex, with a narrower and less dark margin, and less hairy than these of *R. hosmariense*. The flowering period also differs, *R. laouense* is blooming from January to March and *R. hosmariense* from April to June.

Rhodanthemum laouense is diploid with $2n = 18$ chromosomes (Fig. 4), the same number as is found in all other species of *Rhodanthemum* studied so far (Wilcox 1982; Vogt 1991; Vogt ined.). The diploid complement comprises seven pairs of metacentric chromosomes and two pairs with a subterminal centromer position.

Like *Rhodanthemum hosmariense*, *Silene auriculifolia* var. *maroccana* Maire, and other extremely rare palaeoendemic taxa of the Tanger peninsula (Deil 1993), *R. laouense* is a relict species only found on steep limestone cliffs that are absolutely inaccessible to goats. One must conclude that these species are completely intolerant of grazing.

Etymology: The epithet refers to the type locality in the valley of Oued Laou, western Rif mountains.

Material studied:

Morocco, western Rif mountains, Oued Laou, limestone cliffs near the village Tagzout Bani Hasan, 5,3 km NE of the reservoir of Oued Laou, 1,2 km NE of the bridge over Oued Laou along the road between Chefchaouene and El-Tleta-de Oued-Laou, 350 m, $35^{\circ}16'N$, $5^{\circ}15'W$, 22. 4. 1993, *R. Vogt 10065* & *C. Oberprieler 4513* (B, RAB, SEV, herb. Oberprieler, herb. Vogt); *ibid.*, 25. 6. 1992, *R. Vogt 9633* & *C. Oberprieler 4069* (B); Prov. Chauen, Oued Laou, bei Targhzoute, an Kalkfelsen, 560 m, 29. 1. 1989, *U. Deil 2960* (Bayreuth); Rif SW, vallée de l'oued de Talambote à 250 m, rochers calcaires, 16. 7. 1958, *C. Sauvage* (MPU-Sauvage; RAB); Rif SW, Bass. vallée de l'oued Talambote, rochers calcaires, 300 m, 1. 6. 1959, *C.*

Sauvage (MPU-Sauvage); Rif Mountains south of Tetuan, just north of Xauen, 7. 1. 1957, J. Baffery (K).

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SEBASTIAN HOLZAPFEL

A revision of the genus *Picris* (*Asteraceae, Lactuceae*) s.l. in Australia

Abstract

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The genus *Picris* (*Asteraceae, Lactuceae*) s.l. (incl. *Helminthotheca*) is revised for Australia. 13 species are recognized, of which *Helminthotheca echioides*, *Picris altissima* and *P. hieracioides* are considered as introduced in Australia, with only *H. echioides* being successfully established there. All other species, i.e. *Picris angustifolia*, *P. barbarorum*, *P. burbridgei*, *P. compacta*, *P. conyzoides*, *P. drummondii*, *P. eichleri*, *P. evae*, *P. squarrosa* and *P. wagenitzii*, are considered as indigenous and, with the exception of *P. burbridgei* occurring also in New Zealand, as endemic to Australia. *P. angustifolia* is divided into three subspecies, i.e. *P. angustifolia* subsp. *angustifolia*, subsp. *merxmülleri* and subsp. *carolorum-henricorum*, the latter being a combination new to science. For all taxa a key, illustrations, descriptions, distribution maps, notes on ecology and oldest collections are given; for the indigenous taxa the typification and synonymy are presented. Chromosome numbers for all subspecies of *P. angustifolia* as well as for *P. squarrosa* are presented for the first time. The history of the genus in Australia is discussed as well as its status, origin and endangeredness.

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