

**NEW TAXA IN *TANACETUM* (ANTHEMIDEAE)
FROM PAKISTAN**

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A new species, *Tanacetum gilgitii* R. Khan, is described and the new name *T. emodi* R. Khan and the new combinations *T. roylei* (DC.) R. Khan and *T. stoliczkae* (C.B. Clarke) R. Khan are validated.

The preparation of an account of *Tanacetum* for the Flora of Pakistan has led to the recognition of one new species and the necessity for one new name and two new combinations. This paper provides the validation necessary for these new names and combinations.

***Tanacetum gilgitii* R. Khan, sp. nov. Figs 1 & 2.**

Suffrutex 15-25cm altus caulibus ramosis pilosis. *Folia* inferiora in ambitu oblonga pinnatifida, lobis indivisis oblongis fere glabris; folia summa interdum linearia integra. *Capitula* terminalia solitaria; phyllaria brunnescentia scariosa apice lanuginosa; ligulae c. 1cm longae. *Cypsela* 5-costata; pappus irregularis e appendicibus linearibus et dentibus brevibus intermixtis compositus.

Type: Pakistan, Gilgit, Jutial, Nullah, 9000ft., *Stewart* 26241 (holo. BM; iso. K, KUH).

Sub-shrub, 15-25 (-30)cm; stem woody, branched, pilose; leaves alternate, glabrous, 1-2cm including petioles, pinnatifid, often 5-lobed, apex trifid; uppermost leaves often linear and entire; peduncles short; capitula solitary and terminal, 4-6mm, campanulate or hemispherical; involucre bracts 2-3mm, sparsely pilose, with pale brown, short scarios margins. often puberulent at apex; receptacle flat or sometimes hemispherical; ray florets 9-10 (-12)mm; disc florets 2.5-3mm; cypselas 5-6-ribbed, 1.5-2 (-2.5)mm; pappus a corona of short, irregular teeth and free, linear appendages, 0.25-1 (-1.5)mm.

This species has many characters similar to *T. stoliczkae*, but can be distinguished by the presence of irregular teeth and free, linear appendages, found in the pappus. The name of the new taxon refers to the centre of species distribution.

***Tanacetum emodi* R. Khan, nom. nov.**

Syn.: *Chrysanthemum tibeticum* Hook. f. & Thomson ex C.B. Clarke, Compos. Ind. 147 (1876), non *Tanacetum tibeticum* Hook. f. & Thomson ex C.B. Clarke, Compos. Ind. 154 (1876).

Type: Tibet occ. Shyok, Nubra-Ladak, 3000-4100m, *Thomson* s.n. (K).

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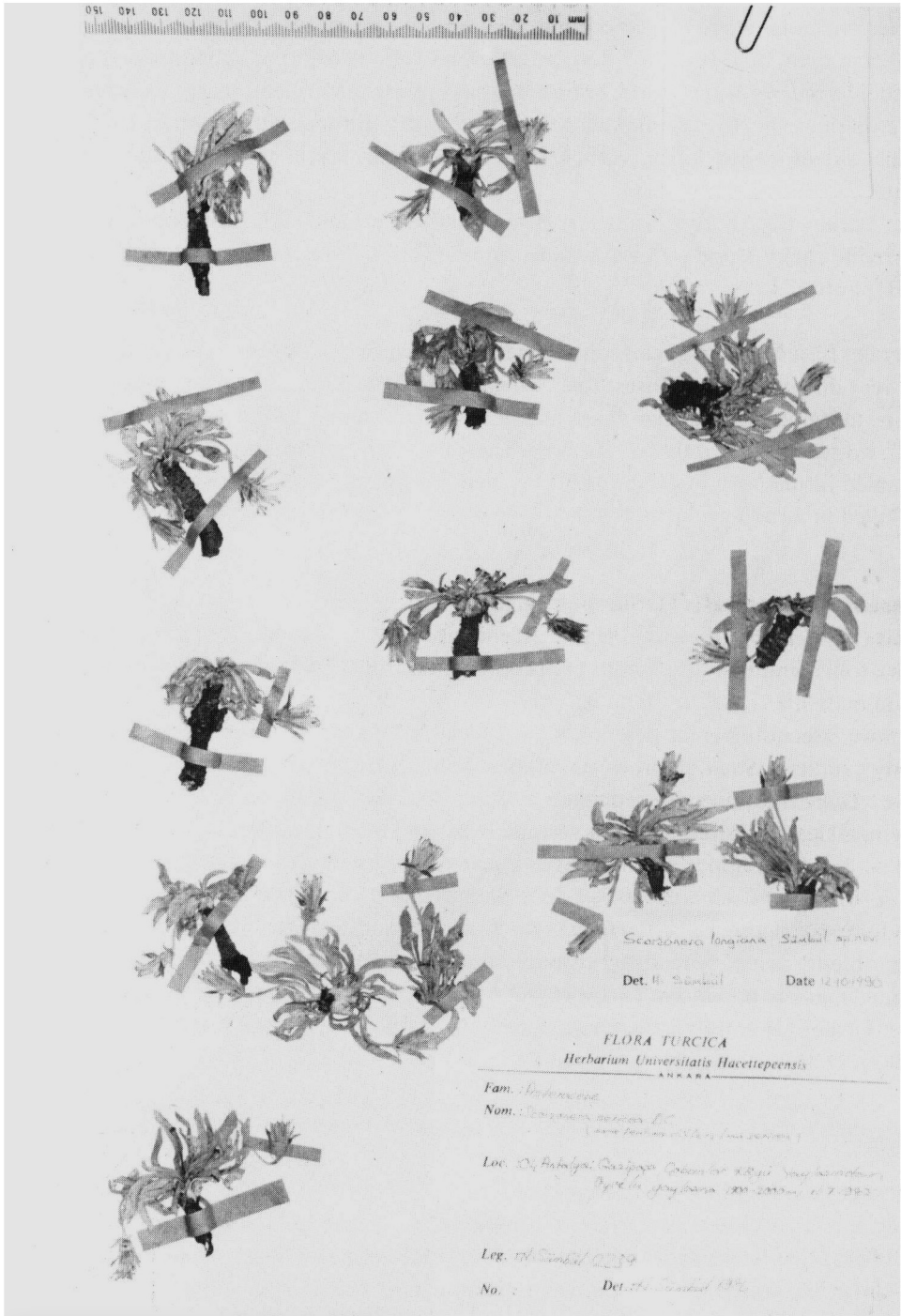


FIG. 4. *Scorzonera longiana*. Holotype.

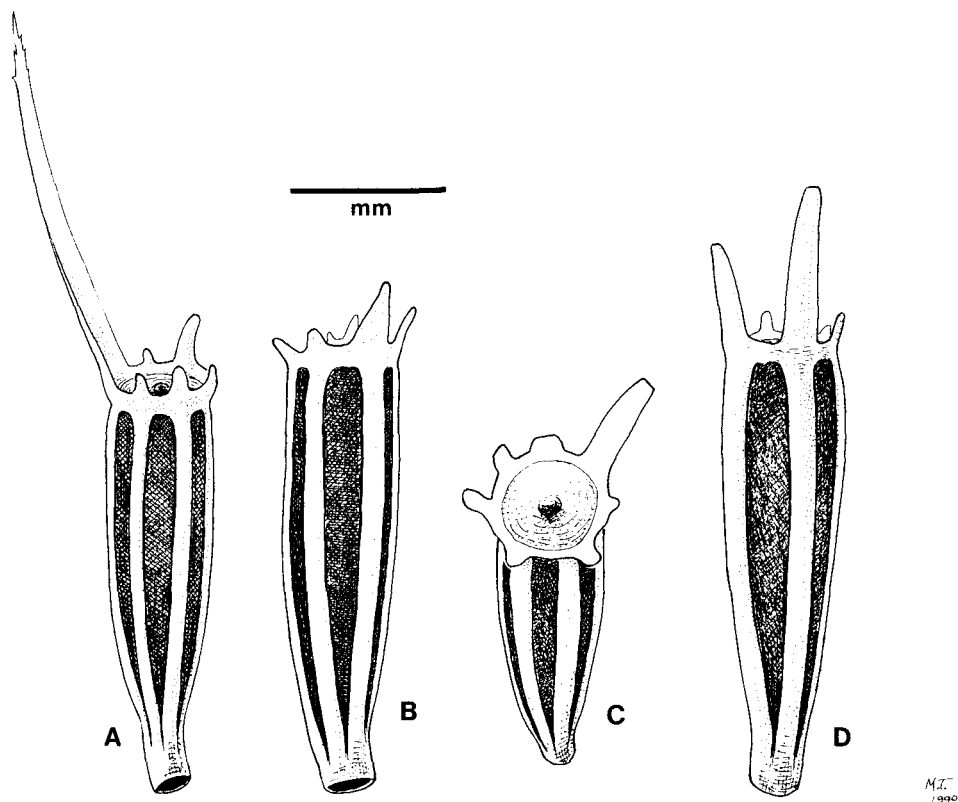


FIG. 2. *T. gilgittii*. A–D, cypselas showing the variations of the pappus.

Material examined:

INDIA. Ladakh: Shyok village, 3000–4000m, Ludlow & Sherriff 9391 (E).

Dry ravines, rocks, damp river beds, 3000–4100m, Ladakh.

A new species name has been introduced for *Chrysanthemum tibeticum* Hook. f. & Thomson, on its transfer to *Tanacetum*, because *Tanacetum tibeticum* Hook. f. & Thomson already exists for a different species. ‘Emodi’ means ‘of the Himalaya’ where the species occurs.

***Tanacetum roylei* (DC.) R. Khan, comb. nov.**

Basionym: *Pyrethrum roylei* DC., Prodr. 6: 56 (1837).

Type: Kashmir, 1833, Royle s.n. (holo. G, IDC microfiche 176, iso. K).

This species, like *T. gilgittii*, also has characters which are similar to *T. stoliczkae*, but can be distinguished by the presence of hoary or pilose stems, and leaves clustered around the inflorescence.

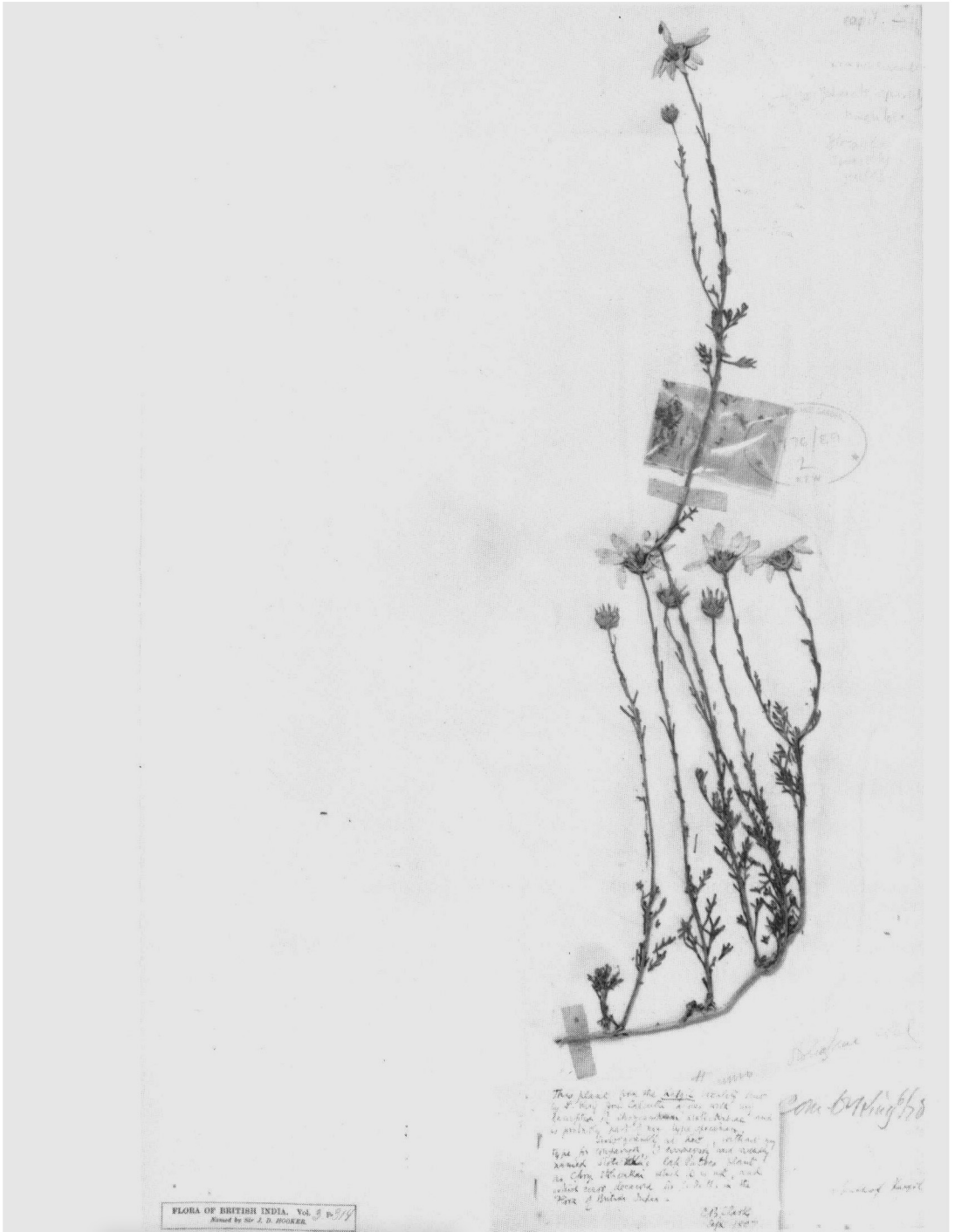


FIG. 3. *T. stoliczkae*. Holotype.



FIG. 4. *T. griffithii*.

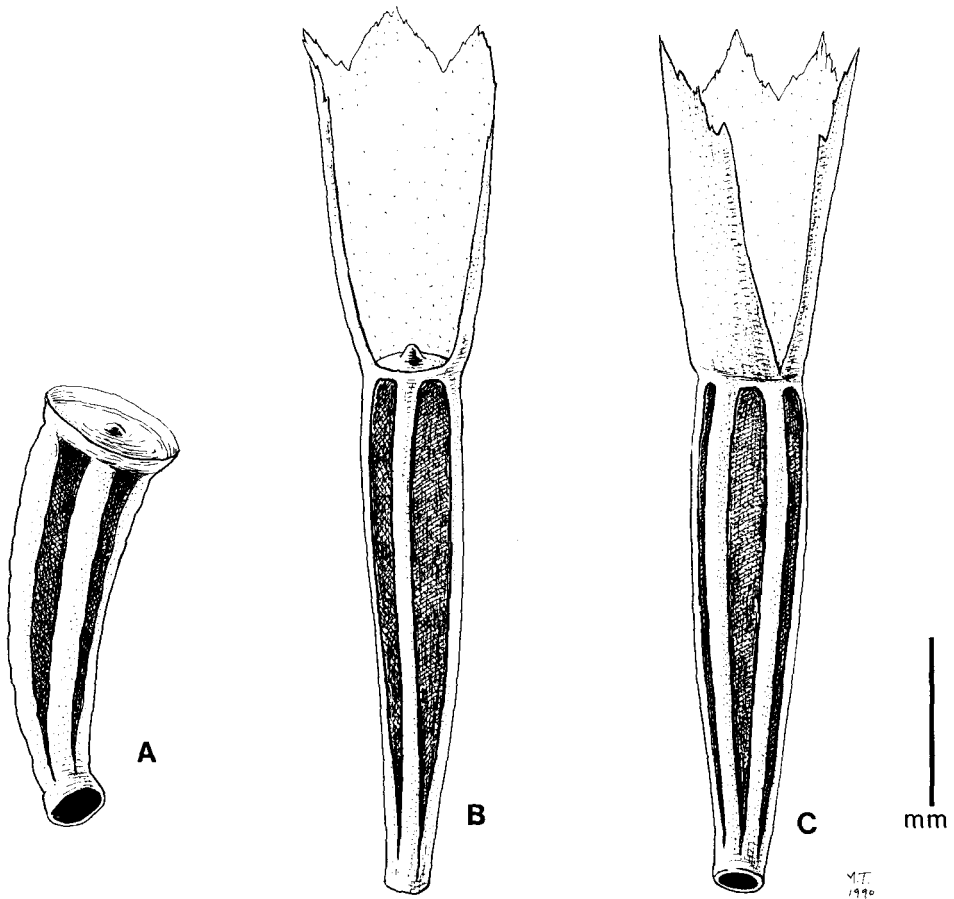


FIG. 5. A, cypselus of *T. stoliczkae*, showing a short corona; B–C, cypselas of *T. griffithii*, showing the variations of the pappus.

This new combination results from the modified generic concepts adopted by Bremer & Humphries (in press) in their forthcoming monograph of the Anthemideae.

***Tanacetum stoliczkae* (C.B. Clarke) R. Khan, comb. nov. Figs 3, 5A.**

Basionym: *Chrysanthemum stoliczkae* C.B. Clarke, Compos. Ind. 147 (1876).

Type: Himalayas, Kargil, 3000–4000m, *C. Stoliczka* s.n. (K).

In crevices of rocks.

This new combination also results from the modified generic concepts adopted by Bremer & Humphries (in press) in their forthcoming monograph of the Anthemideae. It was during this rearrangement that *Spathipappus griffithii* (C.B. Clarke) Tzvel. (Podlech, 1986), was transferred to *Tanacetum* and *Chrysanthemum stoliczkae* C.B. Clarke was shown to be one of its synonyms. Observation of a number of distinct

features distinguished *Tanacetum stoliczkae* from *Tanacetum griffithii*: *T. stoliczkae* – uppermost leaves always linear, entire and glabrescent or glabrous; receptacle mostly hemispherical; pappus a short corona sometimes with deltoid, rigid teeth 0.25 (–0.5)mm. *T. griffithii* – uppermost leaves always pinnatifid and tomentose; receptacle flat; pappus a corona composed of a unilateral membrane 1–1.5 (–2)mm (Figs 4, 5B–C).

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