CONTRIBUTION TO ASTERACEAE FROM PAKISTAN
AND ADJOINING AREAS—SOME NEW TAXA,
COMBINATION AND NEW RECORDS

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Abstract

*Anaphalis chitralensis* M. Qaiser & Rubina Abid and a variety i.e., *Phagnalon schweinfurthii*
Schultz Bip. ex Schweinf. var. *lamondae* M. Qaiser & H.W. Lack of the tribe Gnaphalietae and
*Pluieea arguta* Boiss. subsp. *glabra* M. Qaiser of the tribe Pluieeae are described here as new to
science. A combination in the tribe *Anthemideae* viz., *Tanacetum eriobasis* (Rech.f.) Kovalvsk
subsp. *tricholepis* (Podlech) Qaiser is validated whereas, two taxa viz., *Pentanema nematolepis*
Rech. f. and *Pulicaria glutinosa* (Boiss.) Jaub. & Spach of the tribe *Inuleae* are proved as new
records from Pakistan.

During the preparation of an account of the family Asteraceae for the Flora of
Pakistan the authors came across several interesting specimens, some of them could not
be assigned to any known taxon which are described here as new taxa, whereas, some
were proved to be new records to our area. All such cases are given below.

*Anaphalis chitralensis* M. Qaiser & Rubina Abid sp.nov., (Fig. 1)

*Anaphalis chitralensis* M. Qaiser & Rubina Abid sp.nov., similis *Anaphalis virgata*
Thoms. ex C.B. Clarke, capitulis homogamis semper dioeciiis, phyllaris 4-5- fariis
egladulosos et caule foliisque pilos in grigibus dispersis aggregatos ferentibus differt.

**Typus:** Chitral, 7 miles from Nishkoh on way to Trichmir, Kamal Akhtar Malik &
Nazimuddin 15680 (KUH).

Perennial, much branched shrublet, woody at base, 40-60 cm tall, branches covered
with scattered clumps of white hairs, sparsely to moderately hairy in between the clumps.
Leaves 7-22 x 1-2 mm, upper ones usually smaller, linear, linear-lanceolate, with a small
micro, greenish, margin recurved, more or less densely hairy on both the surfaces but
more on the lower side. With clumps of hairs on both sides. Capitula arranged in terminal
or axillary coryms, whitish, 4-5 x 3-4 mm on densely hairy peduncles with clumps of
hairs but not as pronounced as on branches and leaves. Phyllaries 4-5 seriate, whitish and
scarious in the upper half and brown in the lower half, outer ones 3-4 x c. 1 mm, oblong,
densely floccose to lanate in the middle and at the base, middle and inner ones 4-5 x 0.4-
0.8 mm, more or less oblong-terete, densely floccose to lanate in the middle. Capitula
strictly homogamous either with female florets or bisexual florets (functionally male).
Corolla of female florets 3-3.5 mm long. Cypselae c. 0.5 mm long, papillose, pappus 3-3.5
(-4) mm long. Corolla of bisexual florets 2-4 mm long, pappus 2.5-4 mm long bristly,
ovary more or less abortive, papillose.
Fig. 1. *Anaphalis chitralensis*: A, Habit; B, Portion of twig; C (C₁ – C₅), Involucral bracts (outer to inner); D, Hermaphrodite floret; E, Stamen; F, Stigma & Style.
Specimens examined

Nushkoh on way to Tirchmir, Kamal Akhtar Malik, S. Nazimuddin & Gohar Khan 1532 (KUH); Chatt, Chitrual Gol, 3000 m, on slopes, 10.7.77, Hakim Khan s.n. (RAW); Jalku (?), 21.9.1934, Sher Gul 10467 & 10469 (RAW).

Distribution: Endemic to Chitrual (Fig. 3).

A. chiralensis is closely related to A. virgata Thoms. ex C. B. Clarke in general habit, leaf shape, synflorescence but differs by having large and scattered clumps of hairs on the stem and leaves, strictly homogamous capitulo and eglandular or epapillose phyllaries, whereas, in A. virgata scattered clumps of hairs are absent, capitulo homogamous or heterogamous and phyllaries are either glandular or papillose.

Pluchea arguta Boiss. subsp. glabra M. Qaiser subsp. nov., (Fig. 2).

Differt a subspecies typica folia et caulis toto glabra.

Type: Salt range hills between village Kataha and Pail on Khoshab-Chakwal road, A.Ghafoor & Tahir Ali 3737 (KUH).

Pluchea arguta subsp. glabra Qaiser differs from the type subspecies by having totally glabrous leaves and branches whereas in the type subspecies the stem and the leaves are glandular pubescent. In the type subspecies the capitulo are also somewhat larger, 8-12 in diameter whereas in subsp. glabra the capitulo are 4-7 (8) mm in diameter.

Specimens examined

Arid hill between Bannu and Kohat, R.N. Parkar 3310 (K); Jhelum Dist.: Hirpur, 1937, K.L. Malhotra 15848 (KUH, RAW); Salt range hills, between village Kataha & Pail, on Khoshab Chakwal Road, 1.10.1988, A. Ghafoor & Tahir Ali 3737 (KUH); Rawalpindi Dist.: Dhamyal, 21.11.39, Rajkumar Agarwal s.n. (RAW); Lasbella Dist.: 29 miles from Jhui Jao on way to Bela, 19.10.78, Kamal & Nazim 1162 (KUH); Rakhlehi near Sibi, 500', J.H. Lace 3440 (K); Thana Bulla Khan, 25° 33' N, 67° 51' E ursus Kotri 25° 22' N, 68° 18' E, K.H. Rechinger 28661 (K); Makran Dist.: Turbat, shop of Imam Baksh Mashoooh herbalist, 12.3.1990, A. Ghafoor & Steve M. Goodman 4527 (KUH); Dadu Dist.: Thana Bulla Khan, 25.3.1973, S. Abedin & M. Qaiser 9823 (KUH); Karachi Dist.: Cape Monze near Ganza Mazar, 4.4.1965, P.B. Feroogi (KUH); Clifton, Karachi 25.8.1986, Abnar Hussain & M. Aimed s.n. (KUH); Hyderabad Dsit.: 5 miles from T.B. Khan on way to Hyderabad, 14.10.77, Kamal Akhtar & S. Nazimuadin 725 (KUH).

Distribution: Pakistan and Iran (?).

P. arguta subsp. glabra is more widely distributed than the type variety. The type variety seems to be localized in Baluchistain, Sindh and Gujrat (India) and does not reach to Punjab whereas subsp. glabra is distributed from Baluchistan, Sindh, Punjab and Northwest Frontier Province. Both the subspecies are sympatric in Sindh and Baluchistan (Fig. 3).
Fig. 2. *Pluchea arguta* subsp. *glabra*: A, Habit; A₁, Upper side of the leaf; B-B₂, Involucral bracts (outer to inner); C, Hermaphrodite floret; D, Style and stigma; E, Stamens; F, Female floret.
Fig. 3. Map showing the distribution of *Anaphalis chiralensis* (●); *Pluchea arguta* subsp. *glabra* (O) *Phagnalon sweinfurthii* var. *lamondae* (▲) and *Pentanema nematolepis* (■).


Differt a varietate typica et var. *androssovii* folia 1 mm lata. Phylla media 1 mm lata, ± bruneolus ad apicem. Flores hermaphroditae 20-25 (-30).

**Holotype:** Pakistan Quetta-Sibi. Bolan Pass, Steep rocky gorge, limetsone, alt. 1500 m. 23.4.1965, *Lamond* 721 (E!).


**Distribution:** Endemic to Pakistan (Baluchistan) (Fig. 3).
Qaiser & Lack (1985) recognized two varieties of Phagnalon schweinfurthii i.e. var. schweinfurthii and var. androssovii (B. Fedtch.) Qaiser & Lack. The type variety is restricted to Ethiopia (?) Sudan and Egypt (Qaiser & Lack, 1986), whereas, Phagnalon schweinfurthii var. androssovii is widely distributed from Arabia to Turkmamania through Pakistan and Afghanistan (Qaiser & Lack, 1986; Chaudhry, 2000). A third variety i.e., var. lamondae is also described here.

Both the varieties i.e. var. androssovii and var. lamondae differ from the type variety by having shorter 6-15 x 1-3 (-4) mm leaves which are usually subentire to remotely denticulate with revolute margins. In the type variety leaves are 20-26 x 3-5mm, which are usually entire with flat margins.

A key of all the three varieties is given below:

1 + Leaves usually entire with flat margins, 20-26 mm long .................
   ........................................ Phagnalon schweinfurthii var. schweinfurthii
   - Leaves usually subentire to remotely denticulate with revolute margins, 6-15 mm
     long ......................................................... 2

2 + Leaves (1-) 2-3 (-4) mm broad. Middle phyllaries 1.5-2 mm broad, ± purplish-
   silvery white tipped. Bisexual florets 35-50 ..............................................
   .................................................. Phagnalon schweinfurthii var. androssovii
   - Leaves 1 mm broad. Middle phyllaries 1 mm broad, ± brownish tipped. Bisexual
     florets 20-25 (-30) ................... Phagnalon schweinfurthii var. lamondae

New combination

Qaiser (2002) proposed a new combination viz., Tanacetopsis eriobasis (Rech.f.)
Kovalvsk subsp. tricholepis (Podlech) Qaiser in Flora of Pakistan, Asteraceae-I
(Anthemideae). However, complete reference was not given. In order to validate the new
combination, basionym and complete reference is given below. This subspecies occurs in
Afghanistan, while the type subspecies occurs in Pakistan and Afghanistan.

Tanacetopsis eriobasis (Rech.f.) Kovalvsk subsp. tricholepis (Podlech) Qaiser
comb.nov.

Basionym: Tanacetum eriobasis (Rech.f.) Kovalvsk subsp. tricholepis Podlech in

New Records


Quetta Dist.: Urak, Zargham, 7000 ft., on dryish soil, very common on rocky
corners, H. Crookshenk 407(K!); Ziarat Dist.: Ziarat, 8500ft. May 1890, i.H. Lace
3995(K!) (Fig. 3).

This species was previously recorded from Kandhar, Southern Afghanistan only. The
actual distribution is now Pakistan (Balochistan) and Afghanistan.

Pulicaria glutinosa (Boiss.) Jaub. & Spach, Illus. Pl. Or. 4:77, t. 348. 1853.
Baluchistan coast, 11.8., Pierce s.n. (K!)

This species was previously reported from Mascat, United Arab Emirates and Saudi Arabia.

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References


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