NOTES ON CICHOREAE (ASTERACEAE) FROM PAKISTAN AND KASHMIR: SOME ADDITIONS AND CORRECTIONS

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Abstract

In this study, 9 new combinations, 6 at species level and 3 at varietal level in the tribe Cichoreae have been proposed from Pakistan and Kashmir. Of these, seven taxa, previously placed in Cicerbita Wallr. and one species of Prenanthes L. are now transferred to the genera viz., Melanoseris Decne and Lactuca L. A new combination, Crepidiastrum afghanicum (Podlech) A. Ghafoor & Quiser comb. nov., is also proposed. This taxon is a new record for Pakistan. In order to validate the new combinations and records, basionym, complete reference and a key to differentiate all the four genera viz., Lactuca, Cicerbita, Melanoseris and Prenanthes is also given.

Key words: Cichoreae, Asteraceae, Prenanthes, Cicerbita, Melanoseris, Lactuca.

Introduction

While preparing an account of the tribe Cichoreae (Asteraceae) for the Flora of Pakistan, the present authors came across several taxa which needed new combinations or new names as per nomenclature rules. Bano & Qaiser (2009, 2010) accepted the genera Prenanthes L. and Cicerbita Wallr. and described one new species under Prenanthes L. viz., P. stewartii Roohi Bano & Qaiser and three new species under Cicerbita Wallr. viz., C. alii Roohi Bano & Qaiser, C. gilgitensis Roohi Bano & Qaiser and C. astorensis Roohi Bano & Qaiser from Pakistan along with a previously described species belonging to Cicerbita Wallr. viz., C. aitchinsoniana Beauv. Since then lot of information has been gathered particularly based on molecular phylogeny. Wang et al. (2013) clearly demonstrated on the basis of phylogenetic studies that the genus Melanoseris Decne represented a sister lineage within the subtribe Lactucinae and revealed its sister group relationship to Lactuca L. (s.str.) clearly indicating that the genus Cicerbita Wallr. was a heterogenous taxon. Hence, on the basis of molecular and morphological evidences, it seems reasonable that most of the species of Cicerbita Wallr. and all the species of Perenanthes but one either be transferred to the genus Melanoseris Decne or Lactuca L. thus leaving Perenanthes as a monospecific genus (P. purpurea L., confined to Europe). Similarly the number of species in Cicerbita is also greatly reduced. Originally Melanoseris was considered to differ from Cicerbita (then under the name Mulgedium Cass.) because of its beaked cypsela and from Lactuca due to its biseriate pappus with an outer series of minute bristles. All the four genera viz., Lactuca L., Melanoseris Decne, Cicerbita Wallr., and Prenanthes L., can be identified by the following key characters:

1 + Stem and branches usually glabrous at least in upper half. Capitula always erect on thick peduncle. Involute infundibuliform to cylindrical, glabrous and scarious. Cypselas always strongly compressed, obovoid to elliptic, apex with a slender or capillary-filliform beak (excluding L. erosstrata: beak truncate); beak equaling or 1 ½ or 3 times longer than the body ................................................................. Lactuca

- Stems and branches glabrous, or hairy (hispid or hirsute); Capitula drooping on thin or flattened peduncle. Involute narrowly cylindrical to broadly campanulate, densely hispid or laxly villous, not scarious. Cypselas weakly compressed, elliptic to oblong rarely cylindrical, apically truncate, attenuate or stout beak; beak smaller than the body ........................................................................................................... 2

2 + Leaves all cauline, auriculate-amplexicaul. Capitula narrow. Florets c. 5 per capitulum. Involute 3-5 mm wide .................................................................................................... Prenanthes

- Leaves basal and cauline, amplexicaul. Capitula cylindrical-campanulate. Florets 6- > 30 (excluding M. rapunculoides). Involute 7-12 mm wide ......................................................... 3

3 + Herb tall with many – capitellate narrowly racemiform synflorescence to 50 cm. Involute cylindric. Outer phyllary ½-¾ of inner ones. Inner phyllaries 6-10 (~12) mm long. Cypsela 4-5 mm long ............... Cicerbita

- Herb tall, never with many – capitellate narrowly racemiform synflorescence to 50 cm. Involute broadly cylindric to broadly campanulate. Outer phyllary c. ½ of inner ones. Inner phyllaries mostly exceeding 15 mm. Cypsela more than 5 mm long ............... Melanoseris

- Leaves basal and cauline, amplexicaul. Capitula cylindrical-campanulate. Florets 6- > 30 (excluding M. rapunculoides). Involute 7-12 mm wide ......................................................... 3
Fig. 1. Cypselae of Lactuca Alliance A, Melanoseris lessertiana, B. Cicerbita roborowskii, C. Lactuca viminea, D. Prenanthes purpurea. Adapted from Flora of China illustrations vol. 20-21: 207.

Following new combinations are proposed:

1. Melanoseris astorensis (Roohi Bano & Qaiser) A. Ghafoor, Qaiser & Roohi Bano


Holotype: Pakistan: Astor Dist.: Shaban top above Dombabho, 11.9.2006, Ali Nooret al., 584 (KUH!)

Note: Wang et al. (2015) reduced M. astorensis (Roohi Bano & Qaiser) A. Ghafoor, Roohi Bano & Qaiser (Cicerbita astorensis Roohi Bano & Qaiser) to the synonymy M. lessertiana (DC.) Decne. No doubt M. astorensis is quite similar to M. lessertiana (DC.) Decne, in general appearance. Both the species have more or less sympatric distribution but it can be distinguished from M. lessertiana (DC.) Decne by having stem less habit and solitary capitulum. Where as in M. lessertiana (DC.) Decne, the stem is well-developed and the capitula are in fascicles. Similarly, the pollen morphology of both the species is also different. In the former species, the pollen have 7.5 µm long spines and 7.5 µm thick exine including echinae while in the later species, spines are 6.25 µm long and exine is up to 8.75 µm thick including echinae. Thus on the basis of above said characters the present authors accepted M. astorensis as an independent species.

2. Melanoseris aitchisoniana (Beauv.) A. Ghafoor, Qaiser & Roohi Bano, comb. nov.


Type: - Aitchison 997-1, (G).

3. Melanoseris gilgitensis (Roohi Bano & Qaiser) A. Ghafoor, Qaiser & Roohi Bano comb. nov.


Holotype: Gilgit: Rai-juth between Khaltarow and Jutialnullah, Haramosh, 20.8.2004, Sherwali Khan & Shabbir Hassan 666 (KUH!)

4. Melanoseris stewartii (Roohi Bano & Qaiser) A. Ghafoor, Qaiser & Roohi Bano comb. nov.


Holotype: Kashmir: Rampur, Jhelum Valley Road, Kashmir, c.1200 m, 3.7.1931, R.R. Stewart 12147 (RAW!)

5. Melanoseris lessertiana var. lyrata (Decne.) A. Ghafoor, Qaiser & Roohi Bano comb. & stat. nov.

Type: “In herbosishumidis ad praeedium Gombour ad reg. Cachemiret Thibeaut 3450m circeter”

6. Melanoseris decipiens var. multifida (C.B. Clarke) A. Ghafoor, Qaiser & Roohi Bano, comb. nov.


Syntypes: Kashmir, Thomson s.n. (K!), C.B. Clarke (K!).

7. Melanoseris decipiens var. pakistanica (Roohi Bano & Qaiser) A. Ghafoor, Qaiser & Roohi Bano, comb. nov.


8. Lactuca chiitableensis (Tuisl.) A. Ghafoor, Qaiser & Roohi Bano comb. nov.


Type: Pakistan: “Chitral, Israr to Turikho River, 24–5-1958, 2100 m”, J.D.A. Stainton, 2506 (W).

9. Crepidastrum afghanicum (Podlech) A. Ghafoor & Qaiser comb. nov.


Crepidocephalum afghanicum (Podlech) Sennikov in Komorovia 5 (2):100 Fig. 9. 2008.


Crepidastrum afghanicum (=Youngia afghanica Podlech) was mistakenly reduced to synonym of Crepis flexuosus by Rechinger (1977), although Podlech (1970) clearly mentioned its affinities with the genus Youngia a close ally of Crepidastrum. Now it is correctly placed in Crepidastrum. This is a new record for Pakistan.

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References


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