

## New combinations in the genus *Hieracium s. stricto* and *Pilosella* (Asteraceae)

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In this paper five *Hieracium s. lato* species are shifted into *Pilosella* and one subspecies is raised to species level in *Hieracium s. stricto*. These new combinations bring the number of *Hieracium* and *Pilosella* species in Turkey to 113 and 42, respectively.

Key words: Asteraceae, *Hieracium*, nomenclature, *Pilosella*, taxonomy

In the older literature, *Hieracium s. lato* was divided into subgenera *Hieracium* and *Pilosella*, but most modern works now treat *Pilosella* as a separate genus due to a range of morphological, biochemical, cytological and genetical characteristics (Bremer & Anderberg 1994). While most authors admit that intermediates occur between many taxa within each subgenus, nobody has found intermediates between species in the separate subgenera. For this reason, Sell and West (1974) believed that the two subgenera are best recognized as genera based on achene characters and the presence/absence of stolons. According to Mráz *et al.* (2002) the pollen grain size in *Hieracium* is bigger than in *Pilosella* at the same ploidy level. The differentiation in this character also supports recognition of *Pilosella* and *Hieracium* as genera. Nevertheless, in the literature, the generic name of *Hieracium* has been used in ambiguous senses; it might (Beaman 1990) or might not (Sell & West 1975) include *Pilosella*.

In this study, six nomenclatural combinations for Turkish taxa in the genus *Hieracium* (Asteraceae) are presented in alphabetical order. The

examined material is in the herbarium of Karadeniz Technical University (KTUB).

### *Hieracium s. stricto*

There are two systems in the taxonomy of *Hieracium*: a system with collective species and a system with microspecies. The Central European school of hieraciology generally accepts the broader species concepts (macro-system) and then divides species into subspecies and varieties but Scandinavian and British botanists generally recognize only one entity (microspecies), taxonomically equivalent to subspecies distinguished by Central European botanists (micro-system). Although the taxonomic treatments of apomictic taxa of *Hieracium*, *Rubus* and *Ranunculus* have been varied in the past, recently there is a general consensus that the only useful infrageneric category with the exceptions of series and sections is the microspecies (Stace 1998). Such species are clearly genetically narrower than species in sexually reproducing genera and are frequently

referred to as agamospecies. In accordance with the above view, many new nomenclatural combinations in *Hieracium* have been published up to now (Huber-Morath *et al.* 1975, Sennikov 1998, Coşkunçelebi & Beyazoğlu 2002). My changes in the rank accord with this view.

***Hieracium alismatifolium* (Pospichal)  
Coşkunçelebi, *comb. et stat. nova***

*Hieracium barbatum* Tausch var. *alismaticum* Pospichal, Fl. Oesterr. Küstenl. 2(2): 816. 1899.

*Hieracium racemosum* Waldst. & Kit ex Willd. *subsp. alismaticum* (Posp.) Zahn in Engler, Pflanzenr. 79: 979. 1922.

DISTRIBUTION: Greece, Balkan Peninsula (Bosnia, Istria), Italy, Sicily.

SPECIMEN EXAMINED. **Turkey.** B1 Çanakkale, Kaz Dağı, Evciler, 660 m.

***Pilosella***

In contrast to many other accounts (Zahn 1921–1923, Juksip 1994, Gottschlich 1996), Sell and West (1975) treated *Pilosella* as a distinct genus in the *Flora of Turkey*. During my Ph.D. study (Coşkunçelebi 2001) on *Hieracium* species distributed in NE Anatolia, I stated that a number of *Hieracium s. lato* taxa were not shifted yet into *Pilosella*, although these kinds of combinations were already recognized by several authors (F.W. Schultz, C.H. Schultz, Norrlin, Arvet-Touvet) in the last century (Sojåk 1971). Because of the generic differences between *Hieracium* and *Pilosella* indicated in the Introduction above, five *Hieracium* species are here transferred to *Pilosella*.

***Pilosella longiscapa* (Boiss. & Kotschy ex Nägeli & Peter) Coşkunçelebi, *comb. nova***

*Hieracium longiscapum* Boiss. & Kotschy in Boiss., Fl. Orient. III: 864. 1875. — *Hieracium spathophyllum* Nägeli & Peter *subsp. longiscapum* Boiss & Kotschy ex Nägeli & Peter, Hierac. Mitt.-Eur. 1: 395. 1885.

DISTRIBUTION: Caucasus, Asia Minor.

SPECIMENS EXAMINED. **Turkey.** A8 Rize: Below Ortaköy, İkizdere, 1850 m. B6 Adana: Saimbeyli- Sakız, Slopes of N. Saimbeyli. C5 Adana: S. Aladağ, 1300 m. A8 Trabzon: Çaykara, Kutı Yaylası, 2250 m. A7 Trabzon: Maçka, Sümela-Camiboğazi, 2100 m.

***Pilosella bauhini* Schult. *subsp. magyaricum* Nägeli & Peter var. *laconicum* (Nägeli & Peter) Coşkunçelebi, *comb. et stat. nova***

*Hieracium magyaricum* Nägeli & Peter *subsp. magyaricum* var. *laconicum* Nägeli & Peter, Hierac. Mitt.-Eur. 1: 576. 1885. — *Hieracium bauhini* Schult. *subsp. magyaricum* (Nägeli & Peter) Zahn var. *laconicum* (Nägeli & Peter) Zahn in Engler, Pflanzenr. 85: 1421. 1923.

DISTRIBUTION: Unknown.

SPECIMEN EXAMINED. **Turkey.** B2 Kütahya: Kesik Söğüt, Murat Dağı.

***Pilosella nydeggerorum* (Gottsch.)  
Coşkunçelebi, *comb. nova***

*Hieracium nydeggerorum* Gottsch., Bauhinia, 11(4): 239. 1996.

DISTRIBUTION: Turkey.

SPECIMEN EXAMINED. **Turkey.** A9 Erzurum: Olur to Karadağ, 1700 m.

***Pilosella officinarum* Schultz-Bip. & F.W. Schultz *subsp. trichoscapa* (Nägeli & Peter) Coşkunçelebi, *comb. nova***

*Hieracium pilosella* L. *subsp. trichoscapum* Nägeli & Peter in Hier. Mitteleur. 1: 133. 1885.

DISTRIBUTION: Europe, Asia Minor, Siberia.

SPECIMENS EXAMINED. **Turkey.** A9 Artvin: Ardahan-Şavşat, Slopes 3 km North of Yalnız Çam Geçiti. A9 Kars: Karakurt to Sarıkamış. 10 km from Sarıkamış.

***Pilosella officinarum* Schultz- Bip. & F.W. Schultz *subsp. trichophora* (Nägeli & Peter) Coşkunçelebi, *comb. nova***

*Hieracium pilosella* L. *subsp. trichophorum* Nägeli & Peter, Hierac. Mitt.-Eur. 1: 133. 1885.

DISTRIBUTION: Central, eastern and southern Europe, Crimea.

SPECIMEN EXAMINED. **Turkey.** A9 Artvin: Ardahan-Şavşat, Yalnızçam Geçiti, 2270 m.

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