

# SOME NEW RECORDS OF THE GENUS *HIERACIUM* L. (ASTERACEAE) FROM IRAN

Z. Tavakkoli & M. Assadi

Tavakkoli, Z. & M. Assadi 2006 08 01: Some new records of the genus *Hieracium* L. (Asteraceae) from Iran. –Iran, Journ. Bot. 12 (1); 69-72. Tehran.

*Hieracium piloselloides* Vill, *H. ×auriculoides* (A. F. Lang) Sell & West, and *H. ×matrense* N. P. from sect. *Praealtina* N. P., *H. ×hypeuryum* N. P. from sect. *Pilosellina* N. P. and *H. ×kozlowskianum* Zahn from sect. *Echinina* N. P. are reported for the first time from North and West Iran.

Zahra Tavakkoli, Department of Biology, Teacher Training University of Tehran, Iran. – Mostafa Assadi, Research Institute of Forests and Rangelands P. O. Box. 13185- 116, Tehran, Iran.

Key words. *Hieracium*, Asteraceae, new records, Iran.

گزارش‌های جدید از جنس *Hieracium* در ایران  
زهرا توکلی و مصطفی اسدی

گونه‌های *H. piloselloides* و *H. ×auriculoides* و *H. ×matrense* از بخش *Praealtina* sect. و به ترتیب از زیر بخش‌های *Florentina*، *Praealtoechinina*، *Praealetopilosellina* و *H. ×hypeuryum* گونه از بخش *Pilosellina* sect. و زیر بخش *Hoppeana* subject. و گونه *H. ×kozlowskianum* از بخش *Echinina* sect. و زیر بخش *Incana* subject. برای اولین بار از غرب و شمال ایران گزارش می‌شوند. برای هر یک از گونه‌های فوق نمونه هرباریومی و کمی توضیحات ذکر می‌گردد.

## INTRODUCTION

The genus *Hieracium* in Iran has been revised in Iranian herbaria (i. e. TARI, FAR, TUH) for the project Flora of Iran by the authors. In this paper, some new taxa are reported for the first time for Iran. *Hieracium* includes 19 species in Iran (Rechinger and Lack 1977; Assadi 1987 and Tavakkoli & Assadi 2005).

## NEW RECORDS

**H. piloselloides** Vill., Sojak in Preslia 43: 185 (1971). Azerbaijan: North of Kaleibar, 1500 m, K. Taheri 15317.

This species is related to *H. bauhini*, but differs from it by the absence of stolons. Moreover, it has been reported as *H. piloselloides* subsp. *megalomastix* (NP.) Sell & West in Notes R. B. G. Edinb. 33: 433(1975), with numerous glandular hairs and without or with few glandular hairs in involucre bracts (Sell & West 1975). General distribution of the species is: Central Europe and Balkans to Caucasia, North Iran, Syria and Lebanon (Sell & West 1975).

**H. ×matrense** (N. P.) Hier. Mitteleur. 1: 632. 1885. (*H. pilosella* × *piloselloides*).

Mazandaran: Jangal-e Vaz, 1200-1500 m, Zare 7530; Kojur, Shahkuh, 1500-2800 m, Zare 7531; Mazandaran: Chalus, Vaylar, Nimnar, Kuh – e Tappeh-Lar 1950–2150 m, Termeh, Daneshpajuh & Zargari 10308 p. p.

Plant perennial. Stem 11–17 cm high, with scanty to rather moderate eglandular hairs and rather dense stellate hairs, dense above. Basal leaves lanceolate, almost with scanty hairs on both sides and dense stellate hairs beneath; stem leaves 0-1 in number. Stolons 1–5 in number, slender, short or very long. Inflorescences highly forked with 2–3 capitules. Involucres 8–9 mm long; involucre bracts with rather moderate to moderate hairs, solitary glandular, with dense stellate hairs. It differs from *H. pilosella* in having more than one capitulum per stem and from *H. piloselloides* in its larger capitula usually on long peduncles. It was originally described from Central Europe, Balkan, Asia minor (Juxip1960; Sell & West 1975).

**H. ×kozlowskianum** Zahn in Vestn. Tifl. Bot. Sada 29: 3. 1913. (*H. hoppeanum* × *verruculatum*). Azerbaijan: Ca. 50 km. W. of Khoy, near the Turkish frontier, 2800 m, Assadi & Olfat 68782.



Fig. 1. *Hieracium xmatrense* (x 0.83).

This species differs from *H. hoppeanum* in having several capitula on each stem and its leaves with dense stellate hairs on both sides (similar to *H. hoppeanum* with broad phyllaries) and from *H. verruculatum* in having less and smaller stem leaves. The species is distributed in Caucasus, East Transcaspia (Juxip 1960; Sell & West 1975).

**H. xhypeuryum** N. P. Hier, Mitteleur. 1: 178. 1885. (*H. hoppeanum* × *pilosella*).

Guilan: Mountain above Damesh, East of Rudbar, 2000 – 2100 m, Wendelbo and Ann Ala 18219.

This species differs from *H. hoppeanum* in its narrow phyllaries and with more numerous, longer, slender stolons, and from *H. pilosella* in its thicker stolons and broad phyllaries. The hybrid was reported as *H. hoppeanum* in Flora Iranica. General distribution of the species is: Caucasus: West.–East. South Transcaspia (Juxip 1960; Sell & West 1975).

#### TAXONOMIC NOTE

**H. xauriculoides** (A. F. Lang) Sell & West in Notes R. B. G. Edinb. 33: 432 (1975). (*H. echioides* × *piloselloides*).

Syn.: *H. kandavanicum* (Rech. f. & Zahn) Rech. f. **syn. nov.**

This species is morphologically very variable. It was reported with different names in Fl. USSR (Juxip 1960). They were reported as synonym of *H. xauriculoides* in Fl. Turkey (Sell & West 1975). Rechinger reported it as *H. kandavanicum* from Kandavan area (North Iran). *H. kandavanicum* was characterized by rather moderate to moderate stellate and eglandular hairs on all parts, less stem leaves; involucre without or with few black glands which fall within the variation of *H. xauriculoides* (table 1). Therefore, *H. kandavanicum* is regarded as a synonym of *H. xauriculoides*. Moreover, the specimens collected from the type locality in Kandavan area were

Table 1. Comparison of characters mentioned in literature for *Hieracium kandawanicum* and *H. × auriculoides*.

Characters	<i>H. kandawanicum</i>	<i>H. × auriculoides</i>
Stem length	15-30 cm	15-66 cm
Stolon	without stolon	without or with stolon
Stem indumentum	moderate stellate hairs and rigid 3 -5 mm at base; moderate eglandular hairs and dense stellate above	rather moderate to dense stellate hairs and moderate to dense rigid at base; without or with scanty to moderate eglandular hairs and moderate to dense stellate above
Stem leaves	2-3	2-7
Synflorescence	Densely paniculate-cymose	densely to loosely paniculate corymbose or paniculate-cymose
Peduncle	with rather moderate hairs and dense stellate hairs	without or with scanty to rather dense hairs and dense stellate hairs
Involucre	6-8 mm	6-9 mm
Involucral bracts	with moderate stellate and dark hairs sometimes pale yellow with black base	with scanty to rather dense stellate hairs and black base or dark hairs
Ligule	yellow on both sides	yellow on both sides

studied. They fit very well to the characters of both *H. kandawanicum* and *H. × auriculoides*.

*Specimens seen.* Azerbaijan: 15 km. from Namin to Chulandarreh Sofla to Germe Sirkuh 1600 – 1800 m, V. Mozaffarian & M. Nowrozi 34560; Arasbaran Protected Area, Doghroom & Kalan mountain, Kalan gaurd station towards Savalan Naveh, 2200 – 2550m, Jamzad & Zehzad 70366; Urumiyeh, Ghooschchi pass. Siami 7672; 6 km. from Germe to Ani, W. of Easemar village, 900–1200 m, V. Mozaffarian & Nowrozi; Arasbaran Protected Area, S. of village of Kalaleh 1400 m, Assadi 73911; 5 km. from Salavat to Goli daragh 1500m, V. Mozaffarian & M. Nowrozi 35104. – Kurdistan: 13 km. From deviation on road from Sardasht to Piranshahr 1100 m, Runemark & Mozaffarian 29123. – Mazandaran: Haraz road, above Larijan 2500 m, Assadi 75001; Chalus, Pol – e Zangule margine of Ilka river towards kuh – e Makluz 2500 – 2800 m, Zare; near Kandavan tunnle, Karadj – Chalus road 2220 m, Babakhanlu & Amin 5528; 27 km. to Haraz road from Kandavan 1550 m, Assadi & V. Mozaffarian 33109.

This species usually differs from *H. echioides* in having less stellate and rigid hairs and often with less stem leaves and from *H. piloselloides* in its larger capitula. Its general distribution is: Center, South and East Europe, South Russia, Caucasia and Syria.

## References

- Assadi, M. 1987: Plants of Arasbaran Protected area, NW. Iran (part 1). -Iran. J. Bot. 3 (2): 129-175.
- Juxip, A. Ya. 1960: Hieracium in B. K. Shishkin & E. C. Bobrov Flora of the USSR, vol. 30. -Moskva & Leningrad.
- Rechinger, K. H. & Lack H. W. 1977: Hieracium in K. H. Rechinger, Flora Iranica no. 122: 171-180. - Graz.
- Sell, P. D. & West C. 1975: Hieracium in P. H. Davis Flora of Turkey and the East Aegean Islands, vol. 5: 696- 763. - Edinburgh.
- Tavakkoli, Z. & M. Assadi 2005: A new species and a new record of Hieracium L. (Asteraceae) from Iran. – Iran. J. Bot. 11 (1): 59 – 63.

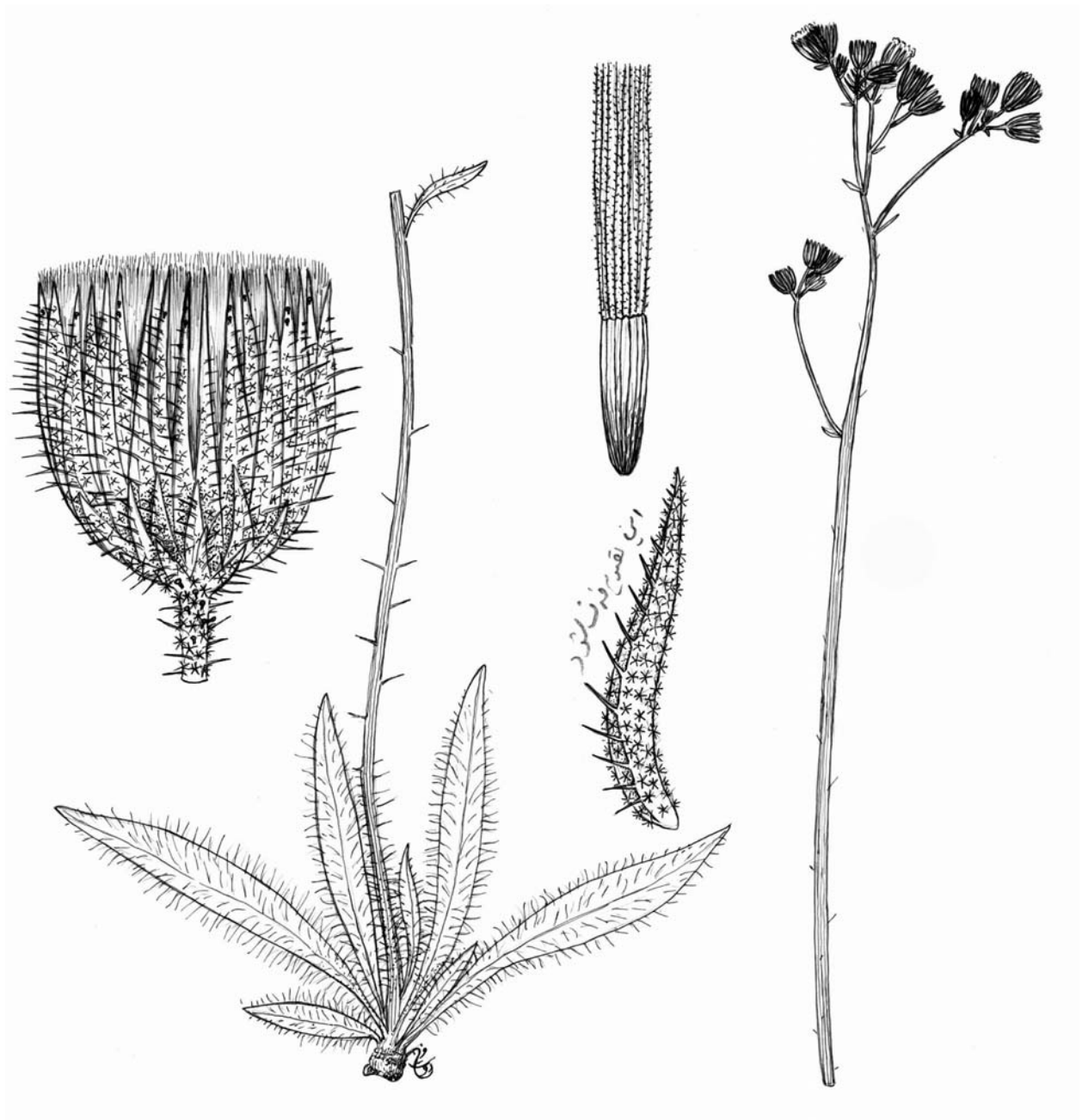


Fig. 2. *Hieracium auriculoides* (x 0.8).