

New *Hieracium* L. (*Asteraceae*) Records for the Flora of Turkey

Kâmil COŞKUNÇELEBİ, Osman BEYAZOĞLU
KTU, Faculty of Sciences and Arts Department of Biology, 61080, Trabzon - TURKEY

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Abstract: Two *Hieracium* L. (*Asteraceae*) species from the NE Anatolia are described as a new records for the Flora of Turkey.

Key Words: New records, *Hieracium*, *Asteraceae*, Turkey.

Türkiye Florası İçin Yeni *Hieracium* L. (*Asteraceae*) Kayıtı

Özet: Bu çalışmada Kuzey Doğu Anadolu' dan toplanan iki *Hieracium* L. (*Asteraceae*) türünün Türkiye Florası için yeni kayıt olduğu tespit edilmiştir.

Anahtar Sözcükler: Yeni kayıt, *Hieracium*, *Asteraceae*, Türkiye

Introduction

Hieracium L. is a large genus of perennial herbs, well-known for its apomictic members and its taxonomic complexity (Beanan, 1990). Nearly 10,000 mostly apomictic species have been described up to now (Guppy, 1978). According to Shaw (1973), the genus includes c. 5,000 apomictic microspecies or 1,000 macrospecies. The genus, according to the monograph written by Zahn (1921-1923), is divided into four subgenera and two of these, *Hieracium* L. and *Pilosella* Hill, are present in Turkey. Sell & West (1974) who prepared the account of *Hieracium* for the Flora of Turkey recognised these the subgenera as distinct genera. Sell et al. (1975) reported 99 species of *Hieracium* from Turkey. The number, together with the species represented here and unrecorded ones in the Flora of Turkey, has reached to 105 (Özhatay et al., 1994, 1999; Gottschlich, 1996; Yıldırım, 1999).

The systematic arrangement of the new records is as follows;

Series *Bifida* (Pugsley) Sell & West

1. *Hieracium cardiophyllum* Jord. ex Sudre

Series *Prenanθοidea* (W.Koch) Sell & West

2. *Hieracium hypoglaucum* (Litw. & Zahn) Juxip ex Sennik.

Results

1. *H. cardiophyllum* Jord. ex Sudre, in Hier. du centre France: 75, T, XXII, 1902 (Figures 1, 3).

Syn: *H. murorum* L. subsp. *cardiophyllum* (Jord. ex Sudre) Zahn. in Engler, Pflanzenreich, 280: 313 (1921); *H. cardiophyllum* var. *acutisquamum* Litw. ex Zahn in Schedae HFRF asc. 42: 18 (1910).

Perennial herbs. Stem 60-75 cm, slightly striate, with scattered simple eglandular hairs at base, subglabrous or sparingly dark glandular and stellate hairs above. Leaves ± glabrous or with scanty hairs (1-2 /2 mm²) above and minute glands along the margins. Basal leaves 60-95 x 55-70 mm, ovate, cordate at base, ± obtuse; petiole up to 10 cm. Cauline leaves 1 (-0) in number, similar to the basal or bractlike with unequal teeth, long acute. Inflorescence corymbose. Capitula 10-15; peduncles up to 1.5 cm, without simple hairs, but with scattered glands (5-10/2mm) and more or less stellate hairs (15-50/2mm). Involucres 10-11 mm long; phyllaries narrowly lanceolate, acute-subacute, barbed, without simple



Figure 1. *H. cardiophyllum*. a-general view of the plant, b-leaf margin, c-peduncle, d-phyllary. Scale bar: a-10 cm, b,c,d-1mm.

eglandular hairs, moderately glandular (70-80 in number) and more or less stellate-pubescent along margins. Ligules glabrous at apex. Styles yellow to dark yellow. Achenes c. 3 mm, brown to dark brown. Flowering July - August. Banks and roadside.

A8 Trabzon: On the roadside and banks of Çaykara to Ataköy, 700-1000m, 11 vii 1998, K. Coşkunçelebi 013, KTUB.

General distribution: Caucasia

H. cardiophyllum is similar to *H. medianiforme* (Litw. & Zahn) Juxip, but differs in the following: stem slightly striate, basal leaves ovate with heart-shaped base, phyllaries barbed, peduncles up to 1.5 cm.

2. *H. hypoglaucum* (Juxip ex Sennik) Litw. & Zahn in Fedde, Repert. 4: 242, 1907; Sched, HFR, 7: 34; Zahn in Pflzr. IV, 280:754 (Figures 2, 3).

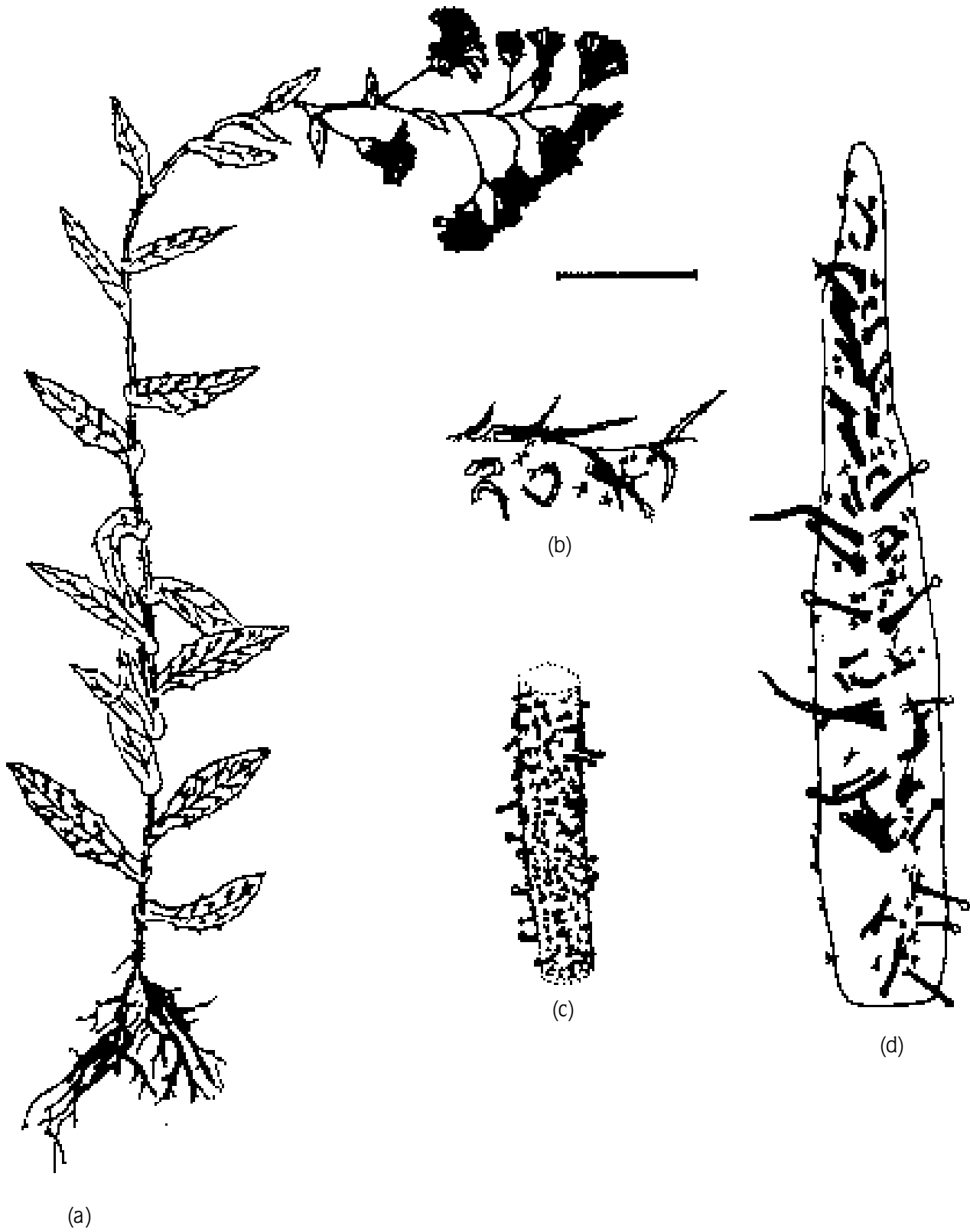


Figure 2. *H. hypoglaucum*. a-general view of the plant, b-leaf margin, c-peduncle, d-phyllary. Scale bar: a-10 cm, b,c,d-1mm.

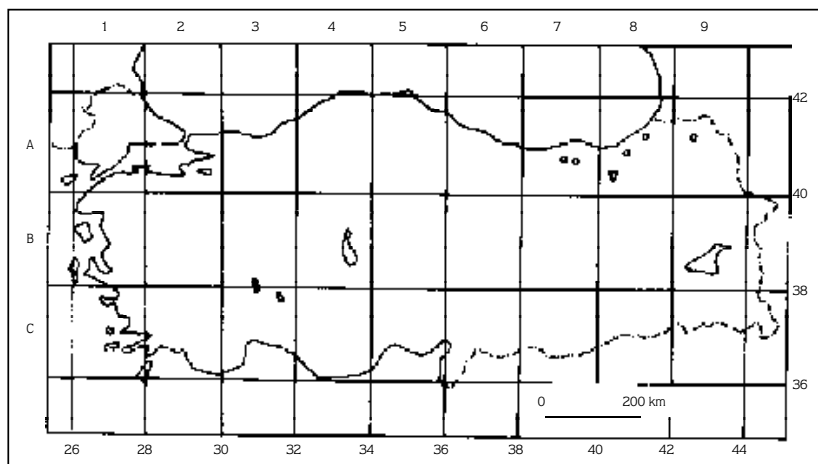


Figure 3. Distribution of *H. cardiophyllum* (Δ) and *H. hypoglaucum* (o).

Syn.: *Hieracium prenanthoides* Vill. subsp. *hypoglaucum* Litw. ex Zahn in Engler, Pflanzenreich 79 (IV.280): 754 (1922).

Perennial herbs. Stems 30-76 cm, reddish at base, with an occasional simple eglandular hair throughout and solitary slender glands and almost without stellate hairs above. Leaves 15-23(-25), all cauline, 13-92 x 4-26 mm, lower ones oblong or ± panduriform, semi-ampexicaule; the rest ovate-lanceolate, sessile, with wide semi-amplexicaul base, distinctly serrate with alternately more or less large and small teeth, glabrous or with scanty simple hairs above and dispersed simple and stellate hairs beneath. Capitula 3-16, partly undeveloped. Peduncles up to 3 cm, without or with solitary simple eglandular hairs and numerous or dense glandular hairs (30-60/ 2 mm). Involucre 8-10 mm, cylindrical-ovate; phyllaries lanceolat or linear-lanceolat, obtuse, glabrous or with few simple eglandular, numerous to dense glandular and sparse stellate hairs. Ligules rarely ciliate at apex. Styles pale yellow to pale red with dark tubercles. Achenes 3-3.5 mm, pale brown. Flowering July - August. Mountain meadows and open pasture in the alpine zone

A7 Giresun: Tamdere, pasture and meadows, 1900-2000 m, 01 viii 1998, K Coşkunçelebi 085, 086, KTUB.

A7 Giresun: Kümpet Yaylası, open pasture, and meadows, 1700 m, 02 viii 1998, K. Coşkunçelebi 097-098; KTUB.

A8 Rize: Çamlıhemşin - Sıraköy, 1850 m, open pasture, 05 viii 1998, K. Coşkunçelebi 100, KTUB.

A8 Rize: İkizdere - Anzer Yaylası, pasture, 09 viii 1998, K. Coşkunçelebi 105, KTUB.

A9 Artvin, Ardanuç - Soğuksu Yaylası şenlik alanı, pasture and *Picea* forest 1800 m., 27 vii 1998, K. Coşkunçelebi 078, KTUB.

General distribution: Russia (European part).

H. hypoglaucum is close to *H. prenanthoides* Vill., but it differs in having stem reddish at base with an occasional simple eglandular hair throughout; cauline leaves up to 25 with dispersed stellate hairs beneath and capitula up to 25.

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