New species of the genus Taraxacum (Asteraceae, Cichorieae) from Croatia II

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Abstract

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Taraxacum veglianum, found on the Istrian peninsula and adjacent islands in the Adriatic part of the Mediterranean Sea, is described as a species new to science and illustrated, and its known distribution is given. It belongs to *T.* sect. *Erythrosperma* and has a chromosome number of $2n = 3x = 24$.

Additional key words: *Compositae,* dandelions, *Taraxacum* sect. *Erythrosperma, Taraxacum veglianum,* taxonomy, Mediterranean

The author has been studying the *Taraxacum* flora of Croatia since 2000 with particular focus on the xerophytic section *Erythrosperma,* the predominant group of this genus in the country. The field research was carried out always in spring, starting in northern Croatia on the peninsula of Istria and gradually moving southwards to central Dalmatia. At least 20 species of *Taraxacum* are currently known from Croatia, only a few of which have already been described so far: *T. edessicoides* Uhlemann (2007), *T. erectum* (J. Mayer) Schrank (Mayer 1785; Schrank 1789; Kirschner & Štěpánek 1993), probably belonging to section *Erythrosperma, T. taraxacoides* (Hoppe & Hornschuch) Willkomm (Hoppe & Hornschuch 1818; Willkomm & Lange 1865–70), *T. parnassicum* Dahlst. (= *T. silesiacum* Dahlst. ex G. E. Haglund) (Dahlstedt 1926; Haglund 1938) and *T. starmuehleri* Uhlemann (2007). One of the hitherto unknown species is described as new to science in the present contribution.

Taraxacum (sect. *Erythrosperma*) ***veglianum*** Uhlemann, **sp. nov.**
Holotype: Croatia, Istria, east coast, Labin S, between Ravni and Skvaranska, roadside, 3.4.2002, *Uhlemann* (B; isotypes: B, DR, herb. Uhlemann).

Planta mediocriter (10–15(–20) cm) alta, gracilis. *Folia* laete canoviridia, subglabra, crispata, immaculata. *Petioli* inalati, angusti, rubropurpurei. *Nervus medianus* sordide viridis. *Lamina foliorum* distincte lobata; *lobi laterales* (3–)4–6(–7) utrimque, lati vel anguste deltoidei, subhamati, patentes vel recurvi, acuti, in marginibus distalibus saepe dense et grosse dentati, in marginibus proximalibus integri vel dente minuto instructi; *lobus terminalis* foliorum exteriorum parvus, sagittatus, foliorum interiorum parvus, lobulo apicali saepe elongato usque linguiforme protracto; *interlobia* bene evoluta, crispata, viridia, saepe dentata. *Scapi* superne valde, ceterum sparse araneosi, brunneo-virides. *Involucrum* olivaceo-viride, pruinosum. *Squamae exteriores* patentes, anguste lanceolatae, supra albo-virides, 2.5–4 latae, 8–10 mm longae, anguste albido-marginatae, sub apice corniculatae. *Calathium* 20–25 mm diametro, luteum, radians. *Ligulae marginales* planae, subtus stria canoviolacea instructae. *Antherae* polline carentes. *Stylus* superne virescens. *Achaenium* obscure (rubro)-brunneum, 3–3.2 mm longum (pyramide exclusa), superne spinulosum, ceterum squamulosum vel rugosum, in pyramidem cylindricam, 0.8–1 mm longam abrupte abiens, rostrum 8–10 mm longum. *Pappus* albus.

Taraxacum veglianum is a delicate plant, 10–20 cm tall with light greyish green leaves. The petioles are thin, unwinged and purple-red. The midrib is brownish green (dirty green). The leaves are distinctly lobed with (3–)4–6(–7) pairs of broadly or narrowly triangular

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Fig. 1. *Taraxacum veglianum,* holotype specimen at B.

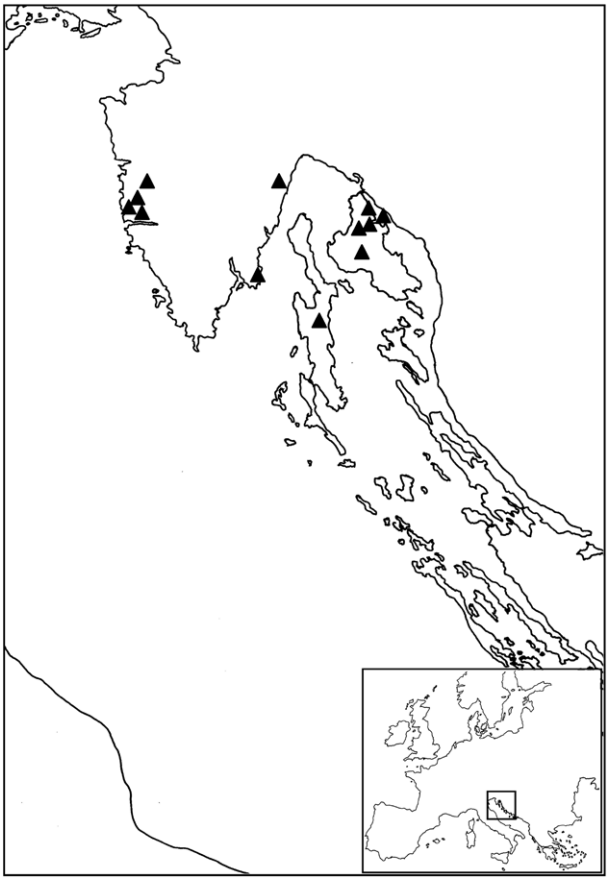

Fig. 2. Known distribution of *Taraxacum veglianum* (▲).

lobes. The lobes may be patent as well as somewhat recurved or hamate and have many coarse teeth along the distal margin, while the proximal margin is usually entire and only rarely has a small tooth. The terminal lobe is not larger than the lateral lobes, and triangular or sagittate on the outer leaves, while smaller and triangular with a lingulate tip on the inner leaves. The interlobes are well differentiated, crispate, dentate and usually green. The scapes are hairy in the upper part and more or less glabrous below. The involucre is dark green and pruinose; the outer bracts are small, lanceolate, patent, bordered, corniculate, 2.5–4 mm wide and 8–10 mm long and whitish green distally. The flower head is about 20–25 mm in diameter and the corollae are pure yellow, but the outermost ligules are striped greyish violet abaxially. Pollen is absent. The styles are discoloured. The achenes are dark reddish brown, the achene body (without cone) is 3–3.2 mm long, the cone is cylindrical and 0.8–1 mm long, the rostrum 8–10 mm long. The pappus is white. – Fig. 1.

Etymology. — The epithet points to the Latin name of the island of Krk (Veglia), where this species is abundant.

Chromosome number. — $2n = 3x = 24$. Chromosomes have been counted in root tip mitoses of material from Krk, Klanice, 13.4.2007, *Uhlemann* (B, DR, herb. Uhlemann).

Affinities. — *Taraxacum veglianum* is mainly recognised by its pollenless flowers, dark reddish brown achenes, thin, unwinged and purple-red petioles and a characteristic leaf lobation. The hamate lateral lobes on the outer leaves become more or less triangular and patent on the inner leaves and their upper edge is strongly dentate.

The leaf shape of *Taraxacum veglianum* is similar to that of *T. lambinonii* Soest (1961), but the latter species differs by more blunt leaf lobes, a lingulate terminal lobe, blackish styles, presence of pollen and greyish achenes. With regard to leaf lobation, *T. veglianum* is also related to *T. aquitanum* Hofstra (1988), originally described from France and characterised by the presence of pollen, smaller achenes and almost smooth upper edges of strongly hamate lateral lobes without any tendency to become triangular and dentate. *T. veglianum* also shares a number of characteristics with the well known Central European species *T. parnassicum* Dahlst. (Dahlstedt 1926) (= *T. silesiacum* Dahlst. ex G. E. Haglund 1938), which resembles *T. veglianum* in general habit as well as in the pollenless flowers and more or less hamate to recurved lateral lobes on the outer leaves, which become more triangular on the inner ones. In contrast, *T. parnassicum* has a more delicate habit, dark greyish green styles and a somewhat different leaf lobation (few teeth, shorter lateral lobes). Because of its characteristic leaf lobation, *T. veglianum* differs considerably from *T. starmuehleri* and *T. edessicoides,* which have been recently described by Uhlemann (2007) from Croatia. With regard to the lobation of the inner leaves, the new species resembles *T. xantholigulatum* Sonck (1977) described from Lake Garda, N Italy, but this species is distinguished by pure yellow styles and numerous teeth on the lower edge of its leaf lobes.

Distribution. – *Taraxacum veglianum* is so far known from Istria and the islands of Cres and Krk in the Bay of Kvarner in Croatia (Fig. 2).

Additional specimens seen. — Croatia: Istria: Gebiet des Monte Maggiore, SW Opatija, am Weg von Lovranska Draga zum Mt Maggiore, 540–560 m, *Carpinus-Juniperus*-Gebüsch, 19.4.1997, *Starmühler* (KL); Westküste, Rovinj NE, Kanfanar SW, c. 1 km vor dem Ortseingang, Wegrand, 2.4.2002, *Uhlemann* (B, DR, herb. Uhlemann); Westküste, zwischen Vrsar und Flengi, Straßenrand, 26.3. 2005, *Uhlemann* (B, DR); Westküste, Rovinj S, Parkanlage an der Küste, lückiger Trockenrasen, 31.3.2005, *Uhlemann* (B, DR); Westküste, Porec, 12 km E, Baderna c. 2 km S, Rakovci, Ortslage, Wegrand, 30.3.2005, *Uhlemann* (B, DR). — Krk: Malinska N, Hauptstraße nach Omisalj, wenig unterhalb des Abzweigs nach Njivice, Straßenrand, gegenüber einer Baumschule, zahlreich, 13.4.2007, *Uhlemann* (B, DR); Malinska E, Rasopasno NE, Klanice, ruderal im Dorf, 13.4.2007, *Uhlemann* (B, DR, herb. Uhlemann); Malinska S, Hauptstraße nach Krk, c. 2 km nördlich des Abzweiges nach Nenadic, Straßenrand, zahlreich, 13.4.2007, *Uhlemann* (B, DR);

Nordostküste, Dobrinj N, Straßenrand zwischen Klimno und Soline, 8.4.2007, *Uhlemann* (herb. Uhlemann); Nordostküste, Straßenrand zwischen Rudine und Cizici, 10.4.2007, *Uhlemann* (herb. Uhlemann). — Cres: Inselmitte, zwischen Vrana und Batanji, Kiefernwald, Straßenrand, 4.4.2002, *Uhlemann* (B, DR).

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