

**JURINEA MOLLIS (L.) REICHENB. SUBSP. SUBHASTATA
(PANČIĆ) DIKLIĆ & NIKOLIĆ STAT. ET COMB. NOV., AN
INTERESTING PLANT FROM NORTHEASTERN YUGOSLAVIA**

by

N. DIKLIĆ & V. NIKOLIĆ *

Abstract

DIKLIĆ, N. & V. NIKOLIĆ (1981). *Jurinea mollis* (L.) Reichenb. subsp. *subhastata* (Pančić) Diklić & Nikolić stat. et comb. nov., an interesting plant from northeastern Yugoslavia. *Actas III Congr. OPTIMA. Anales Jard. Bot. Madrid* 37 (2): 597-606.

J. PANČIĆ (1874) was the first who revealed the species *Jurinea subhastata* in the northeastern Serbia (Yugoslavia). Later this taxon was omitted by all other authors. We have presented some additional data about this taxon. The comparative morphological and chorological analyses have shown that this plant may be classified as a separate taxon of the subspecies rank within rather widespread species *Jurinea mollis* (L.) Reichenb.

Resumen

DIKLIĆ, N. & V. NIKOLIĆ (1981). *Jurinea mollis* (L.) Reichenb. subsp. *subhastata* (Pančić) Dicklić & Nikolić stat. et comb. nov., una planta interesante del noreste de Yugoslavia. *Actas III Congr. OPTIMA. Anales Jard. Bot. Madrid* 37 (2): 597-606 (En inglés).

Pančić descubrió la especie *Jurinea subhastata* en Serbia (Yugoslavia), siendo posteriormente olvidada por otros autores. Un análisis morfológico y corológico comparativo nos muestra que esta planta puede ser incluida con rango de subespecie dentro de *J. mollis*.

INTRODUCTION

PANČIĆ was the first to describe the occurrence of the new plant species *Jurinea subalata* growing in the northeastern Serbia (Mali Štrbac mountain), in 1874. The record is cited in «*Flora Kneževine Srbije*», but no detailed morphological features are available (*nomen nudum!*). In 1884, PANČIĆ presented the detailed description of the species mentioned above in «*Dodatak Flori Kneževine Srbije*» determining it as *Jurinea subhastata* Pančić. In his study, PANČIĆ emphasized the differences between the new species and the allied species *Jurinea mollis* (L.) Rchb. belonging to the genus *Jurinea* Cass. Although both species cited occur in the selfsame region, the new species is characterized by alate decurrency of lower caulin leaves (Fig. 1).

(*) Natural History Museum, Beograd, Yugoslavia.

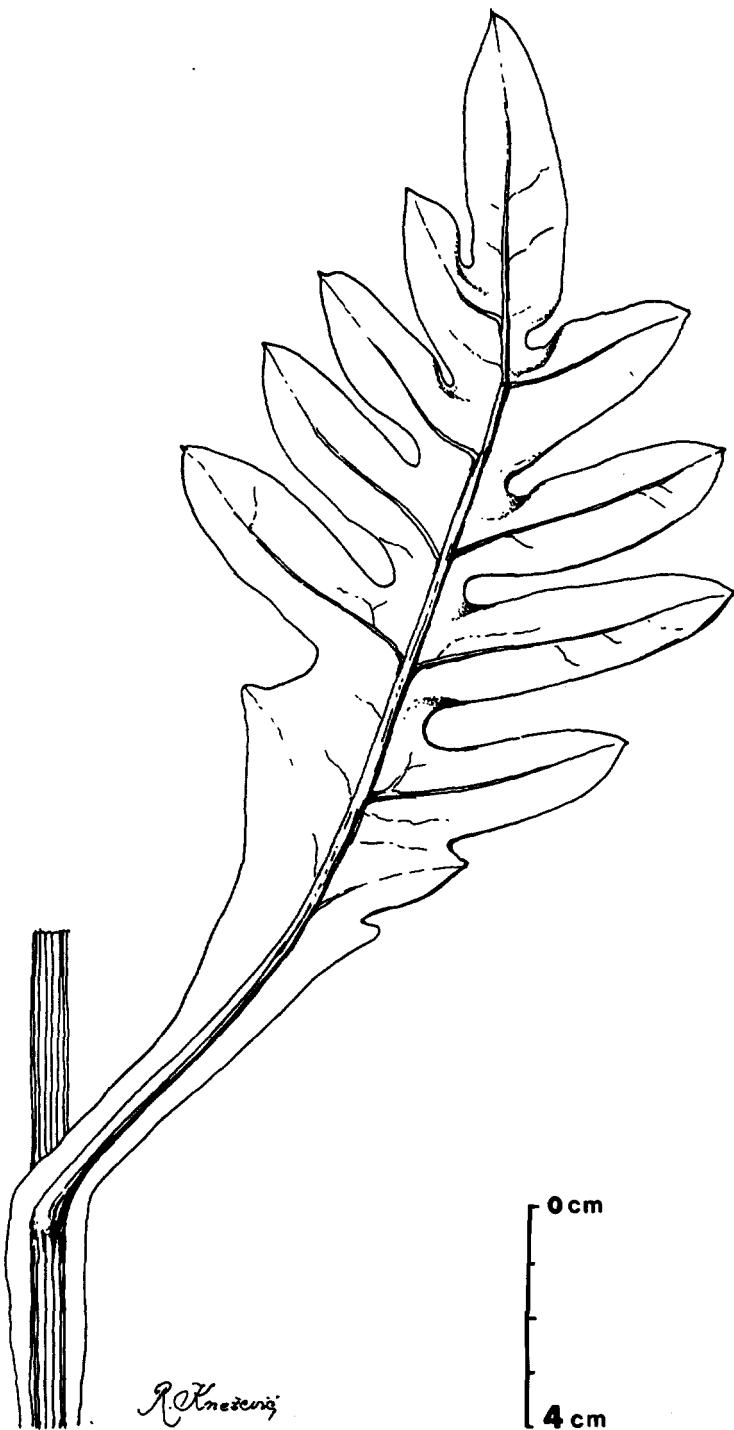


Fig. 1.—*Jurinea mollis* (L.) Reichenb. subsp. *subhastata* (Pančić) Diklić & Nikolić: Cauline leaves.

BORBÁS (1887) described a new plant species from the genus *Jurinea* Cass., found in Rumania, which exhibited the same phenomenon, namely, alate decurrency of caudine leaves extending to the middle of internodes. This species is determined as *Jurinea subdecurrens* Borbás. NYÁRÁDY (1964) defined this taxon as the infraspecies form *Jurinea mollis* (Torn.) Rchb. subsp. *macrocalathia* (K. Koch) Soó var. *subdecurrens* (Borb.) Nyárády.

PODPERA (1902) recorded a new taxon belonging to the same genus for Bulgaria, namely, for the eastern Roumelia. The taxon mentioned above was determined as a variety and included in the species *Jurinea mollis* (L.) Rchb. var. *decurrens* Podpera. This author noted its firm texture and its decurrent caudine leaves characterized by broader leaf segments when compared to the typical form. No revolute segments were found.

It should be emphasized that PANČIĆ was one of a small number of investigators who cited the species *Jurinea subhastata* as an separate taxonomic form. However, HAYEK (1931) cited it as a synonym of the species *Jurinea bipinnata* Adamović. Considering the striking morphological differences occurring between these two taxa, HYEK'S suggestion seems to be unjustified. In «*Flora SR Srbije*», GAJIĆ (1975) omitted this species. The same is true for KOŽUHAROV (1976) in «*Flora europaea*».

In past few years we collected abundant herbarium material on the taxon *Jurinea subhastata* growing at the classical locality recorded by PANČIĆ. Also, we have presented some additional data. The comparative morphological and chorological analyses have shown that this plant may be classified as a separate taxon of the subspecies rank within rather widespread species *Jurinea mollis* (L.) Reichenb.

DESCRIPTION

***Jurinea mollis* (L.) Rchb. subsp. *subhastata* (Pančić) Diklić & Nikolić
stat. et comb. nov.**

Bas.: *Jurinea subhastata* Pančić, Dodatak Flori Kneževine Srbije: 169 (1884).

Syn.: *Jurinea subalata* Pančić, Flora Kneževine Srbije: 438 (1874), nom. nud. *Jurinea subdecurrens* Borbás, ÖBZ 37: 298 (1887). *Jurinea mollis* (Torn.) Rchb. subsp. *macrocalathia* (K. Koch) Soó var. *subdecurrens* (Borb.) Nyárády, Flora RP Romane 9: 764 (1964). *Jurinea mollis* (L.) Rchb. var. *decurrens* Podpera, VZBG Wien 52: 660 (1902). *Jurinea mollis* (L.) Rchb. subsp. *eumollis* Hayek f. *decurrens* (Podp.) Hayek, Prodr. Fl. Penins. Balc. 2: 701 (1931).

Perennes. Caulis basi lignosus, plerumque ad basin ramosus, erectus, 50-90 cm altus, ± arachnoideo-tomentosus. Folia in pars inferiore caule congesta; basalia 10-20 cm longa, 2-7 cm lata, longe petiolata, pinnatipartita, rachide ad 14 mm lata, segmentis lanceolatis vel obovato-lanceolatis, ad 17 mm latis, margine non revolutis; folia supra viridia, ± sparse arachnoidea,

subtus albocinereo-tomentosa; folia caulina media indivisa vel rarius ± pinnatipartita vel lirata, longe decurrentia; folia caulina superiora pauca, linearia. Capitula 1-5, magna, 5,5 (6) cm diametro; involucrum arachnoideo-lanatum, phylla exteriora et media linearis lanceolata, in apicem linearis filiformem refracto-recurvum producta, intima erecta, marginem scabrida, supra sparse glandulosa, glandulis sessilibus, longe acuminata. Flores purpurei. Achaenia 4-5 mm longa, subpyramidata, longitudinaliter rugosa et leviter tuberculata; corona conspicua (Fig. 2); pappi setae 3-4 interiores exterioribus plures longiores et sublatiores, ad 10 mm longes. VI.

TYPES

«*Locus classicus*» of this plant is recorded from northeastern Serbia, namely, for Djerdapska klisura on the Danube river on the mountain Mali Štrbac (626 m). It grows on the soil on limestone in the region resembling the Mediterranean karst, situated in the northeast.

Holotypus of the Pančić's plant was not found.

Topotypus: Herbarium Natural History Museum, Beograd.

RELATIVES

The comparative morphological features of a number of related taxa are presented in Tab. 1. One can see numerous variations in structure of both vegetative and reproductive organs of these plants. *Jurinea subhastata* Pančić differs from the typical subspecies *Jurinea mollis* (L.) Reichenb. subsp. *mollis* (Fig. 3) in firmer, ramose stem, leaves larger with the specific structure, decurrent, pappi two times as long as achenes. Unlike the taxa *Jurinea mollis* (L.) Reichenb. subsp. *moschata* (DC) Nyman, *Jurinea subhastata* is characterized by stem with lesser dense arachnoid indumentum, specific leaf size, structure and arrangement, smaller number of capitula, and finally, by specific shape of acheneal accessories. Comparing the taxa *Jurinea glycantha* (Sibth. & Sm.) DC (Syn.: *Jurinea mollis* (L.) Reichenb. subsp. *macrocalathia* (K. Koch) Sò) with *Jurinea subhastata* one may see that latter has firmer stem, leaves pilose, their arrangement and structure specific, corona more conspicuous with longer pappus. Finally, the estimation of the differences between *Jurinea subhastata* and *Jurinea arachnoidea* Bunge shows that *Jurinea subhastata* has firmer, ramose stem, leaves of specific character, broader inflorescences, achenes of specific structure and longer pappi.

All the above mentioned contribute to the statement that *Jurinea subhastata* Pančić represents well established taxon from the morphological point of view, differing in a number of characters from all the related plants and representing the infraspecies form at the level of subspecies, within the species *Jurinea mollis* (L.) Reichenb.

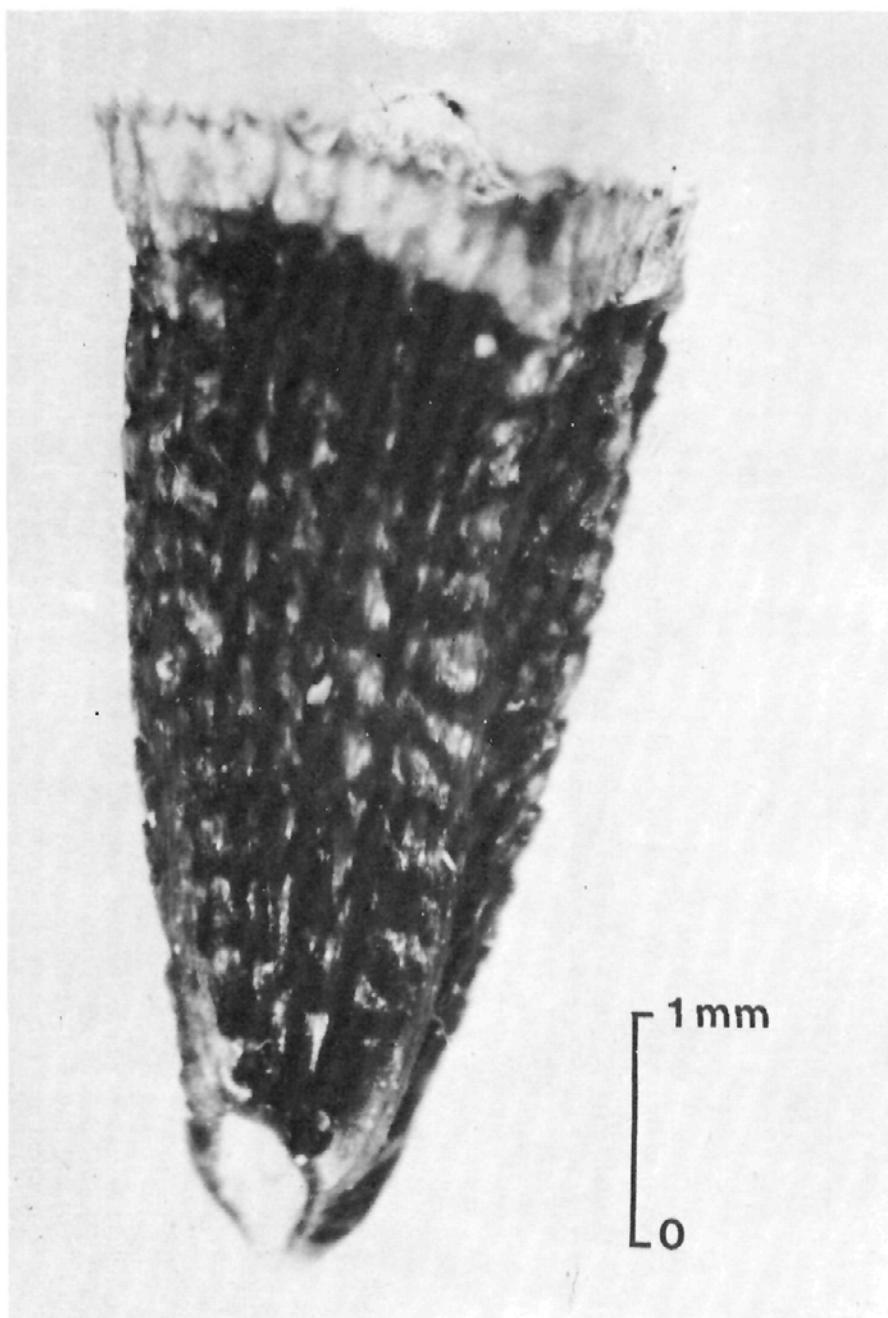


Fig. 2.—*Jurinea mollis* (L.) Reichenb. subsp. *subhastata* (Pančić) Diklić & Nikolić: Achene.

TABLE I
THE COMPARATIVE MORPHOLOGICAL FEATURES

Character	<i>Jurinea mollis</i> (L.) Rehb. subsp. <i>mollis</i>	<i>Jurinea glycyrrhiza</i> (S. S.) DC. <i>J. macrocalathia</i> K. Koch	<i>Jurinea consanguinea</i> DC. subsp. <i>arachnoidea</i> (Bge) Kožíšek	<i>Jurinea subhastata</i> Panč.
Stems	30-70 cm leafy in basal half	30-70 cm leafy throughout	30-60 cm usually leaves only at base	20-35 cm leafy in basal half
Leaves	basal leaves pinnatifid, segments lanceolate, oblong-lanceolate, with revolute or undulate margin. usually grey, with arachnoid indumentum.	basal leaves pinnatifid, segments lanceolate, oblong-lanceolate or oblong-lanceolate with undulate margin. with arachnoid indumentum.	basal leaves shallowly pinnatifid, segments oblong-lanceolate or obvov-lanceolate, with slightly revolute margins.	green and subglabrous above, arachnoid-tomentose beneath.
	cauline leaves pinnatifid, or entire, not decurrent.	cauline leaves linear, dentate ad base.	cauline leaves linear, linear-lanceolate, not decurrents.	cauline leaves shallowly pinnatifid or entire, long decurrent.
Capitula	1-3 globose or hemispherical 2.5 × 2.4, 5 (6) cm.	5 or more globose or hemispherical 4.5 cm.	1 hemispherical 4.5(7.5) cm	1-5 hemispherical 5.5(6) cm
Involucral bracts	lanceolate to elliptic-lanceolate, with arachnoid indumentum, recurved and purple distally, the inner much longer than the outer, scabrid.	herbaceous, with dense arachnoid indumentum, recurved and purple the inner much longer than the outer.	linear to linear-lanceolate, long acuminate, outer strongly recurved and slightly hooked at apex, densely arachnoid-tomentose, inner cristate, glabrous.	unequal, the outer more than 1/2 as long as the inner, lax distally, convex at the base, coriaceous, arachnoid.

Achenes	3-5 mm, longitudinally rugose, glabrous, corona conspicuous.	finely ribbed, glabrous, corona conspicuous.	4-5 mm, conical, tuberculate, indistinctly ribbed, corona inconspicuous.	acutely verrucose, glandular-hairy, brown, corona inconspicuous.	tetragonal - obpyramidal, 4-5 mm, longitudinally rugose and tuberculate, glabrous, brown, corona conspicuous.
Pappus	as long as achene	as long as achene.	slightly longer than achene.	as long as achene.	about twice as long as achene, with 3-4 of the inner hairs, 3 times as long as the outer.

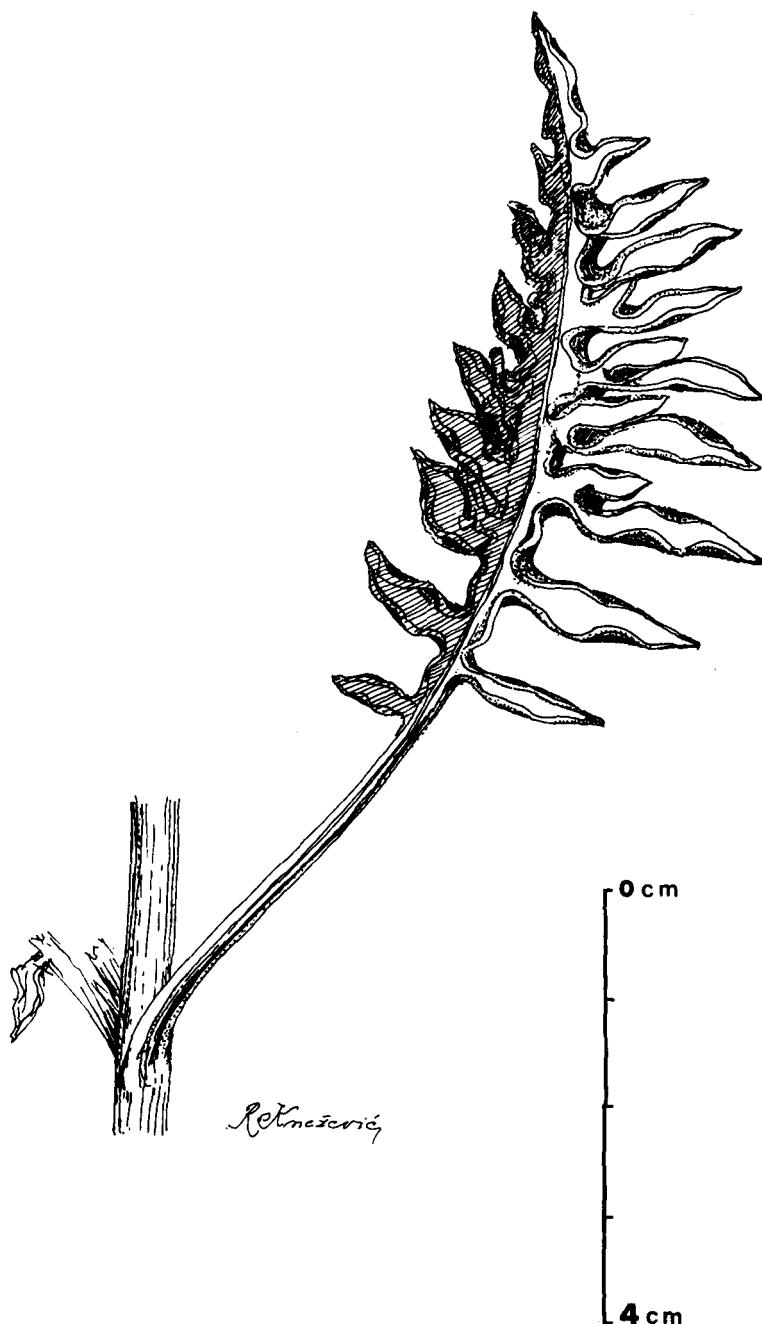


Fig. 3.—*Jurinea mollis* (L.) Reichenb. subsp. *mollis*: Cauline leaves.

GEOGRAPHY

Its areal includes the Danube Basin. *Jurinea subhastata* Pančić belongs to the mesial floral element occuring in Rumania (Orsova-Baile Herculană), in Yugoslavia (Djerdapska Klisura-Mali Šrbac), and in Bulgaria (Šumen-Razboj) (Fig. 4).

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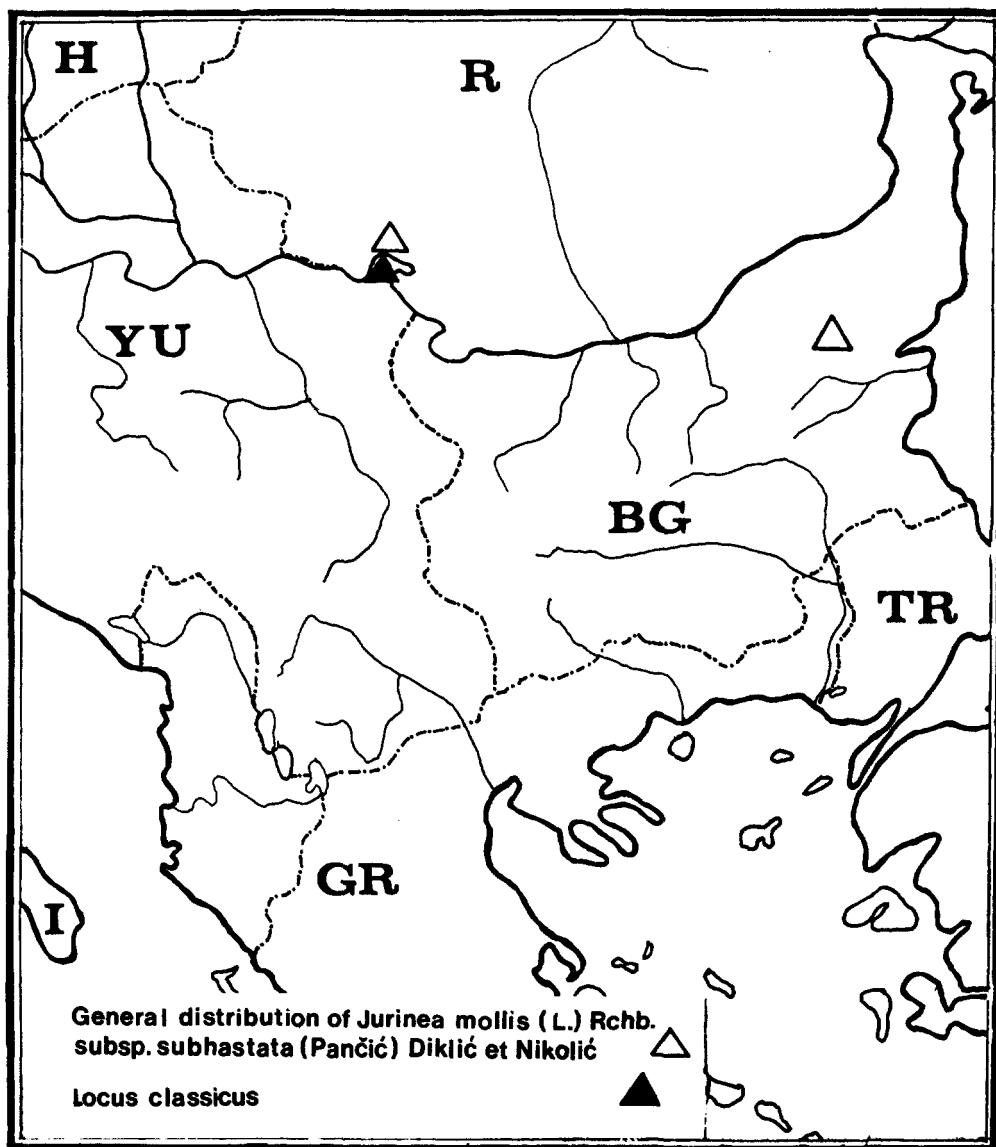


Fig. 4.—General distribucion of *Jurinea mollis* (L.) subsp. *subhastata* (Pančić) Diklić & Nikolić.