A NEW STAND
OF HIERACIUM PILOSUM SCHLEICH. EX FROELICH (ASTERACEAE)
IN THE POLISH TATRA MOUNTAINS

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ABSTRACT
A new stand of H. pilosum, a species not reported before from the territory of Poland, was found in the Polish Western Tatra Mts. It grows in numerous stands on limestone rocks on the slopes of Upląziaska Kopka, at ca. 1400 m a.s.l. Moreover, typical form of this species, collected in the Polish Western Tatra Mts, was also found in herbaria of KRA and KRAM. These data indicate that H. pilosum is a widespread species in the described region but it was unrecognized from H. villosum so far.

KEY WORDS: Hieracium pilosum, Asteraceae, distribution, Western Tatra Mts, Poland.

INTRODUCTION
Hieracium pilosum Schleich. ex Froelich (H. moristanum Rchb. f., H. villosiceps Naegeli et Peter) occurs in the subalpine belt of mountains of Europe with central distribution in Alps (Aeschimann et al. 2004). The species grows preferentially on limestone rocks and soils in an association Seslerio-Caricetum sempervirens. It shows a similar distribution, habitat and morphology to H. villosum.

As compared to H. villosum, ground leaves of H. pilosum are often more numerous and outer leaves of rosettes more rounded. H. pilosum shows lower number of cauline leaves – 3-6 vs (3-) 4-8 (-15) for H. villosum and the hairiness of the whole plant is more villous than in the case of H. pilosum. The most pronounced trait differentiating both species is the shape and the arrangement of the involucral bracts. For H. pilosum all the bracts are of similar size and shape, narrow-lanceolate and adhering (Fig. 1). In the case of H. villosum the 3-8 outer bracts (the uppermost cauline leaves) are leaf-shaped, broad lanceolate, erect, causing the heads to be not so distinctly separated from the stem.

H. pilosum is known in the Western Carpathians only from the Slovakian part of the mountains. The first finding, given by Zahn (1930-1939), was from Mt Rozsucec in the Malá Fatra Mts. Further records from Malá Fatra (Krivánska Fatra) Mts were given (Súchý 1468 m, Stoh 1607 m), as well as from Velká Fatra Mts (Súchý vrch 1550 m, Čierny kameň 1480 m, Malá Pustavčia 1559 m) by Bernátová et al. (1995). Recently, this species was found in the Western Tatras at the pass under Mt Osobitá, ca 1570 m (Chrt et al. 2004). However, this species was not reported yet from the territory of the Polish Carpathians.

The four stands of H. pilosum in Velka Fatra were characterized as follows: 1) Seslerio variae-Caricetum tatrorum with a significant contribution of Astragalus penduliflorus; 2) phytocoenosis with the dominance of Salix alpina; 3) Seslerio-Festucetum tatræae; 4) phytocoenosis with the predominance of Carex ripostis (Bernátová et al. 1995).

The chromosome number of H. pilosum from Mt. Osobitá was 2n=27 (Chrt et al. 2004), i.e. the same as for H. villosum collected in Velká Fatra Mts, Malá Fatra Mts, Nízke Tatry Mts and Bielské Tatry Mts (Chrt et al. 2004). However, for H. villosum collected in other stands in the Western Carpathians, tetraploid chromosome number (2n=36) was recorded. Outside the Western Carpathians tetraploid counts also strongly prevail (Schuhwerk 1996).

RESULTS
A new stand of H. pilosum was found (12.07.2009) on Pien rocks, on the southern slopes of Upląziaska Kopka, at an altitude of ca 1400 m a.s.l., close to the tourist track leading to Ciemiaki (Czerwone Wierchy) in the Western Tatras Mountains. The species grows in cleavages of limestone rocks exposed to the western direction, rarely solitary, usually in groups of dozens or more individuals. Alto-
Fig. 1. *Hieracium pilosum* on Piek rocks in the Polish Western Tatra Mts (photo: J. Kruk, 12.07.2009).

[More photos of *H. pilosum* from the described stand taken by the author can be found at: http://www.atlas-roslin.pl]
gether, around a few hundreds plants were found. It grows in nearly pure stands or in association with other plants, most often Carex firma.

As compared to the data from Velká Fatra Mts (Bernátová et al. 1995), where this species was a minor component of all the mentioned phytocenoses, the new stand of H. pilosum in the Polish Western Tatra Mts is considerably more abundant.

Typical H. pilosum was also found in herbaria of KRA and KRAM where it was collected in the Polish Western Tatra Mts (determined as H. villosum). Moreover, among the other investigated material, several specimens showed intermediate character between H. pilosum and H. villosum. These data indicate that H. pilosum is a widespread species in the Polish Western Tatra, but it was unrecognized from H. villosum so far.

Herbarium specimens of H. pilosum (ut H. villosum): lateral gully of Zleb Warzęcha at the foot of Mały Giewont, grassy terraces, 2.08.1912, leg. T. Wilczyński, det. J. Bryła (KRAM 264250-54); Giewont, swards in the mountain pass Wrótka, 1590 m, 7.08.1973, leg. A. Jasiewicz (KRAM 366137); Hala Królowa Wyżnia, Królowe Rówienki, swards at altitude 1550 m, 13.07.1981, leg. A. Jasiewicz (KRAM366138); Dol. ku Dziurze, limy rocks at outlet of cave, 1020 m, 5.07.1961, leg. R. Rajchel (KRA 0153343); Hala Tomana, bottom of a dried up brook, ca. 1340 m, 17.07.1961, leg. A. Pacyna (KRA0153344).

The specimen from the described stand was deposited in the herbarium of the Jagiellonian University (KRA).

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LITERATURE CITED

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