

Project Update: January 2016

Data publication and sharing

The field expeditions and detailed investigations on environmental conditions, as well as on plant communities and population structure allow me to outline general conclusions about threats, status and conservation requirements of the genus *Aconitum* in Chornohora Mts. As a result, 10 taxa were identified as threatened. However, three taxa (*A. variegatum variegatum*, *A. variegatum podobnikianum*, and *A. lycoctonum lycoctonum*) are still not confirmed for Ukrainian Carpathians, and four taxa (*A. firmum firmum*, *A. firmum* nothosubsp. *fussianum*, *A. lasiocarpum lasiocarpum*, *A. lasiocarpum kotulae*) are still not confirmed for Chornohora (Tab. 1).

Tab. 1. Threatened categories and distribution of monkshoods in Ukrainian Carpathians.

Taxon	Threat Category	Endemic Status	Occurrence in Ukrainian Carpathians	Occurrence in Chornohora
Subg. <i>Aconitum</i>				
Sect. <i>Aconitum</i>				
<i>A. bucovinense</i> Zapł. fo. <i>bucovinense</i>	EN	South-Eastern Carpathian endemic	+	+
<i>A. bucovinense</i> Zapł. fo. <i>orthotricha</i> Gáyér	EN	South-Eastern Carpathian endemic	+	+
<i>A. xczarnohorensis</i> (Zapł.) Mitka	VU	Eastern Carpathian endemic	+	+
<i>A. firmum</i> Rchb. subsp. <i>firmum</i>	VU	Pan-Carpathian endemic	+	?
<i>A. firmum</i> Rchb. subsp. <i>fissuræ</i> Nyárády	VU	Pan-Carpathian endemic	+	+
<i>A. firmum</i> Rchb. nothosubsp. <i>fussianum</i> Starmühl.	VU	Pan-Carpathian endemic	+	?
<i>A. xnanum</i> (Baumg.) Simonk.	VU	South-Eastern Carpathian endemic	+	+
Sect. <i>Cammarum</i> DC.				
<i>A. variegatum</i> L. subsp. <i>variegatum</i>	DD		?	?
<i>A. variegatum</i> L. subsp. <i>podobnikianum</i>	DD		?	?
<i>A. lasiocarpum</i> (Rchb.) Gáyér subsp. <i>lasiocarpum</i>	VU	Eastern Carpathian endemic	+	?
<i>A. lasiocarpum</i> (Rchb.) Gáyér subsp. <i>kotulae</i> (Pawł.) Starmühl. & Mitka	VU	Pan-Carpathian subendemic	+	?
<i>A. degenii</i> Gáyér subsp. <i>degenii</i> fo. <i>degenii</i>	LC	Pan-Carpathian endemic	+	+
<i>A. degenii</i> Gáyér subsp. <i>degenii</i> fo. <i>craciunelense</i> Gáyér	LC	Pan-Carpathian endemic	+	+
<i>A. degenii</i> Gáyér subsp. <i>degenii</i> var. <i>intermedium</i> (Zapł.) Mitka	LC	Pan-Carpathian endemic	+	+
<i>A. xgayeri</i> Starmühl.	LC	Eastern Carpathian endemic	+	+

Sect. Acomarum Starmühl.				
A. xcammarum L. em. Fries	LC	none	+	+
Subg. Anthora (DC.) Peterm.				
Sect. Anthora DC.				
A. anthora L.	VU	none	+	+
Subg. Lycoctonum (DC.) Peterm.				
Sect Lycoctonum DC.				
A. lycoctonum L. em. Koelle subsp. lycoctonum	DD	none	?	?
A. moldavicum Hacq. subsp. moldavicum	LC	Pan-Carpathian subendemic	+	+
A. moldavicum Hacq. subsp. hosteanum (Schur) Graebn. & P. Graebn.	LC	Pan-Carpathian subendemic	+	+
A. moldavicum Hacq. subsp. nothosubsp. simonkaianum (Gáyer) Starmühl.	DD	Eastern Carpathian (sub)endemic	+	+
A. moldavicum Hacq. subsp. nothosubsp. porcii Starmühl.		South-Eastern Carpathian and Bihor endemic	+	-

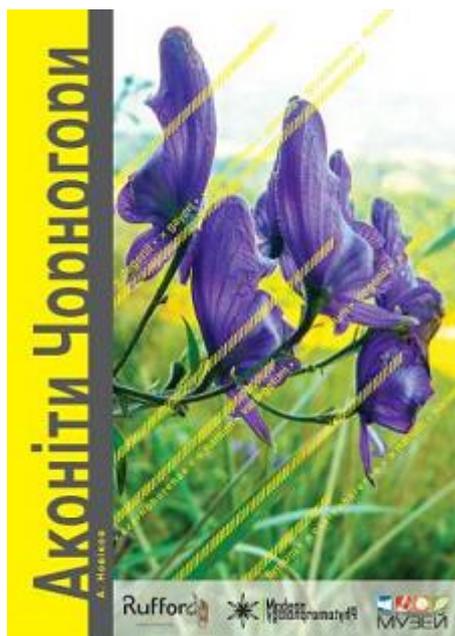


Fig. 1. The cover of published book.

Chorhohora and could be used as a beautiful gift and/or for sending the messages by regular post. Therefore, instead of announced 500 flyers I prepared and published 6000 postcards which are freely distributed. Book, post cards and recommendations are shared in schools, Natural History Museum, Tourist information center of Lviv, Carpathian Biosphere Reserve and Carpathian National Nature Park etc.

Unfortunately I was not able to fit all of obtained results into the frames of announced brochure, and therefore I prepared the more valuable and extended book “Monkshoods of Chornogora”. This book is freely available in internet (<http://phytomorphology.org/PDF/Books/Aconitum%20brochure%20full.pdf>) and the hard version (which is now in print) will be freely shared in 2016. On the base of the results I also prepared short recommendations on protection of the monkshoods in mountains.

Instead of announced flyers I decided that it will be more rational to publish postcards which will contain the short description of the most threatened *Aconitum* taxa in



Fig. 2. Six packages with printed postcards (1000 pcs. per each) which correspond to six most threatened *Aconitum* species.

Finally, I started the work scientific paper which will contain detailed information about my studies on genus *Aconitum* in Chornogora, including all of raw field data and maps of distribution, as well as short notes on problems of conservation of the genus in Ukrainian Carpathians. This paper will be published in frames of RISE (Ranunculacean International SEMinar) and will be presented and discussed during the work of seminar which will be held on 20-21 April in Lviv.



<p>Aconitum bucovinense Аконіт буковинський</p> <p style="text-align: right;">EN SEC</p> <p><i>Aconitum bucovinense</i> is an endemic taxon for South-Eastern Carpathians and it is extremely rare plant in Ukrainian Carpathians. In Chornogora Mts only two local populations of <i>A. bucovinense</i> in <i>orthotricum</i> have been found by today. Both populations are in good condition but commonly they contain less than 100 generative plants. Among the main threats – the overgrowth by woody plants and changes in the hydrological regime of habitats, as well as trampling by tourists.</p> <p>Rufford    </p>	<div style="border: 1px solid gray; width: 80px; height: 80px; margin: 0 auto;"></div> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
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Fig. 3. Example of avers and reverse sides of postcards.