Amphi-Adriatic connections in Flora and Vegetation

Similarities and issues still open raising from ancient routes of migration and shared landscapes



1st INTERNATIONAL Meeting on the AMPHI-ADRIATIC FLORA and VEGETATION

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Book of abstract

Dipartimento di Pianificazione Design Tecnologia dell'Architettura













The Italian and the Balkan Peninsulas are two of the most important centres of plant diversity in the whole Europe. Due to similar paleogeographic and paleoclimatic vicissitudes these two mountainous systems provided many sites that worked as refugia for the thermophilous flora and vegetation during the Quaternary glaciations. For this reason the Balkans and the Apennines exhibit a high rate of endemic plants and share a large number of amphi-Adriatic or trans-Adriatic taxa and syntaxa.

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Topics

- Plant Taxonomy and Systematics
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A new association of *Mulgedio-Aconitetea* in the Tuscan-Romagna Apennines. Phytogeographic considerations on the syntaxonomy of this class in the Apennines

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Starting from some syntaxonomic insights necessary to classify a newly described association of *Mulgedio-Aconitetea*, we underline some phytogeographic differences between the northern and the central-southern Apennines concerning the mountain vegetation.

The new association was characterized by the dominance of *Cirsium alpis-lunae* Brilli-Cattarini et Gubellini (Asteraceae), a strictly endemic yellow-flowered thistle recently [1] described in the northern Apennines, in the proximity of the conventional border with the central Apennines. This species typically lives on humid and unstable steep slopes, on earthy screes derived from sandstone-marly flysch substrata, at altitudes between 1100 and 1300 m a.s.l., and can be considered a "mega-forb", colonizing the open spaces in spatial contact with the *Fagus sylvatica* woods [2].

After the description of the new association *Laserpitio latifolii–Cirsietum alpis-lunae*, we found some problems to classify it at the higher syntaxonomical ranks. In our opinion the suitable alliance was the *Adenostylion alpinae*, which was already used as reference for tall-herb communities in the Piedmont Apennines (N-Apennines) [3]. This alliance, however, was considered a later synonym of *Senecionion samniti*, in the recent Eurovegchecklist [4]. In our opinion *Adenostylion alpinae* and *Senecionion samniti* exhibit such a marked difference in their coenological and biogeographical features that is very difficult to consider them as synonyms [2]. Similar considerations were expressed in a recent nomenclatural revision concerning the distribution of the tall-herb communities in the Balkans [5].

The case in issue is only one of the multitude of examples that could be used to highlight the great differences existing between northern and central-southern Apennines, in terms of Flora, vegetation, biogeographical history and epionthological



evolution. The northern Apennines have much more floristic similarities with the Alps and the Central-Europe than with the rest of the Apennines, but they still belong to the Apennine range. The coenological consequences deriving from this justify, in our opinion, the proposal of autonomous N-Apennine syntaxa, at the alliance rank, well separated from those described both for the Alps and the central-southern Apennine ones.

Fig. 1 – Cirsium alpis-lunae community on unstable steep rocky-earthy slopes

1) Brilli-Cattarini A.J.B., Gubellini L. 1991. Una nuova specie di *Cirsium* (Compositae, Asteroideae, Cynareae) dell'Appennino etrusco meridionale. Webbia, 46 (1): 7-17.

2) Viciani D., Lazzaro L., Gonnelli V., Lastrucci L., 2019. A new plant community with the strictly endemic *Cirsium alpis-lunae* (Asteraceae) in the Northern Apennines (Italy) and considerations on the alliances *Senecionion samniti* and *Adenostylion alpinae*. Medit Botany, 40 (1): 43-51.

3) Biondi E., Allegrezza M., Casavecchia S., Galdenzi D., Gasparri R., Pesaresi S., ..., Blasi C. 2014. New and validated syntaxa for the checklist of Italian vegetation. Plant Biosyst, 148: 318-332.

4) Mucina L., Bültmann H., Dierßen K., Theurillat J.-P., Raus T., Čarni A., ..., Tichý L. 2016. Vegetation of Europe: hierarchical floristic classification system of vascular plant, bryophyte, lichen, and algal communities. Appl. Veg. Sci., 19: 3–264.

5) Lakušić D., Ranđelović V., Di Pietro R., 2015. Nomenclature adjustments to neglected syntaxa of the tall-herb hygrophilous communities of the SE-Europe. Period. Biolog., 117 (3): 383-397.