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## **ABSTRACTS**

KEYNOTE LECTURES, COMMUNICATIONS, POSTERS

## An overview of the Italian forest biodiversity and its conservation level, based on the first outcomes of the 4<sup>th</sup> Habitat Report ex-Art. 17

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In 2019 the 4<sup>th</sup> Report ex-Art. 17 on the conservation status (CS) of Annex I Habitats of the 92/43/EEC Directive was expected by every EU/28 country, with reference to the period 2013-18. In Italy, the process was in charge to the Italian Institute for Environmental Protection and Research (ISPRA), on behalf of the Ministry for Environment, Land and Sea Protection (MATTM), with the scientific support of the Italian Botanical Society (SBI). A large group of thematic and territorial experts elaborated the available data concerning the 124 types of terrestrial and inland water Habitats present in Italy, 39 of which are represented by Forest Habitats (Group 9),. The main aim of the work was the evaluation of the overall CS of each Habitat by Biogeographic Region (Mediterranean, Continental and Alpine), for a total amount of 294 assessments. A high proportion of these (92, corresponding to 31% of the total) referred to Forest Habitats, including 20 marginal types for which the CS was not requested.

The analysis was carried out at different scales: a) administrative territory, through the data contained in the ISPRA database, whose compilation was in charge to the Regions and Autonomous Provinces; b) Natura 2000 site, with the latest updates available (Standard Data Forms updated to 2018); c) national scale, implementing the distribution maps for each Habitat based on the European grid ETRS89-LAEA5210 (10x10 km<sup>2</sup> mesh); d) Biogeographic Region, scale of the final assessment. Cartographic outcomes, associated databases and additional data used for the assessments will be available online on the ISPRA Portal as soon as the validation process by the European Commission will be completed. A dedicated archive named "HAB IT" has been created in the national database "VegItaly" (1), managed by the Italian Society of Vegetation Science, where the phytosociological relevés representative of the various Annex I Habitats in Italy will be archived and freely accessible. An overview of the results regarding the Forest habitats is here provided, including a comparison with the outcomes of the former reporting cycle, the 3<sup>rd</sup> Report ex-Art. 17 (2). In several cases (e.g. 9120, 91L0), the distribution maps have been remarkably improved due to better knowledge and more fitful interpretation. The conservation status resulted as Favourable (FV) for 6,7%, Inadequate (U1) for 58,7% and Bad (U1) for 32,0% of the 72 assessed forest Habitat types. In no case there was an improvement of the conservation status, while in 6 cases a worsening of the conditions resulted from the data analysis, pointing out the Habitats types with a higher need of action.

Similarly to other projects carried out as a team by the network of Annex I Habitat experts of the Italian Botanical Society and the Italian Society for Vegetation Science (e.g. 3, 4), this is another step in the direction of supporting the implementation of the 92/43/EEC "Habitat" Directive in Italy and Europe. On this ground, the high biodiversity of the Italian forest Habitats could be emphasized, however results pointed out that some rare or endemic types (e.g. *Alnus cordata* or *Betula aetnensis*-dominated forests) are still scarcely acknowledged by the most prominent EU conservation tools such as the Annex I to the "Habitat" Directive.

- 1) F. Landucci et al. (2012) Plant Biosyst., 146(4), 756-763
- 2) P. Genovesi et al. (2014) ISPRA, Serie Rapporti, 194/2014
- 3) E. Biondi et al. (2009) Società Botanica Italiana, MATTM, D.P.N., http://vnr.unipg.it/habitat/
- 4) D. Gigante et al. (2016) Plant Sociology, 53(2), 77-87