





# 54<sup>th</sup> SISV Congress

Twenty years in the third millennium

with Vegetation Science

**September 28th-29th 2021** 

**Abstract book** 

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The 54th Congress of the Italian Society for vegetation Science was set to be hold in June 2020 at the Faculty of Architecture of the University of Rome. The explosion of the COVID-19 pandemic in the spring of last year led first to move the congress to October 2020 and then definitively to 2021. However, the persistence of the serious situation of COVID-19 infections in Europe during these first months of 2021 and the uncertainty about the results of the current vaccination campaign does not allow us to plan a "face to face" congress as we had planned it.

The SISV 2021 congress will therefore be carried out as a virtual conference.



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#### THE GENISTA RADIATA-DOMINATED COMMUNITIES IN ITALY: DIVERSITY AND CLASSIFICATION

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Genista radiata is a dwarf/low orophilic shrub having a fundamentally South-European distribution. In Italy, it can be found in different ecological contexts, often giving rise to diversified coenoses, from heliophilous primary communities in limiting edaphic conditions, to secondary mantle shrublands, to coenoses of dynamic stages colonizing secondary grasslands. Due to its ecological plasticity, in the past literature G. radiata communities have been considered in local works sometimes as simple dynamic variants of grasslands aspects, sometimes as more or less stable shrublands, and this interpretation has changed over time. We therefore analyzed the coenological and ecological features of the Italian communities dominated or co-dominated by G. radiata, searching for the presence of floristic-sociological groups, allowing a sound and updated comprehensive classification from a syntaxonomical point of view. An Italian comprehensive data-set of 129 published + unpublished relevés in which G. radiata had relevant cover values has been investigated by means of multivariate analysis. The ecological requirements of the resulting groups were indirectly calculated by means of Ellenberg Indicator Values, and a chorological analysis was performed. The fidelity coefficient (phi) for the diagnostic species of each group was calculated. According to our analysis, nine different types of G. radiata communities were found to be present in Italy. Each group was characterized by means of its floristic, ecological and chorological components, and investigated as to its syntaxonomic aspects. This allowed to attribute the Italian G. radiata communities to nine different associations, four of which already existing and five proposed as new associations or as stat. nov. The classification at higher levels of these syntaxa is discussed and a comprehensive syntaxonomic scheme is proposed.