



University of Genova

Department of Earth, Environmental
and Life Sciences

Doctorate Course in Earth and
Environmental Science and
Technology

Università degli Studi di Genova



Dottorato in Scienze e Tecnologie
per l'Ambiente e il Territorio

Research Theme n. 2

<p>Titolo: Variazioni di flora e vegetazione connesse con insediamenti montani con particolare riguardo alle IAS nelle Alpi occidentali e/o Appennino settentrionale</p> <p>Title: Changes in flora and vegetation related to mountain settlements with regard to invasive alien species in Western Alps and/or North Apennines.</p>
<p>Tutor (name and email) and eventual co-tutor: Prof. Mauro Mariotti m.mariotti@unige.it</p>
<p>Program description including the formation program abroad</p> <p>IAS are species whose introduction and spread outside their natural ecological range poses a real threat to biodiversity and the economy. It is estimated that there are already over 12,000 alien species present in Europe, of which around 10–15% are invasive. Some of them can damage the functioning of entire ecosystems. A number of EU funds can be used to assist Member States in eradicating or managing IAS on their territory, including the Rural Development Programme, INTERREG and the EU LIFE fund.</p> <p>Mountain rural settlements have a long-lasting local and landscape-scale legacy, and imprint a unique signature on the flora, that we can observe also after their abandonment. The program is aimed to understand the links between IAS and rural communities and factoring these into cost-benefit models is complex, depending upon a range of local-level attributes such as the time since invasion, abundance, impacts on biodiversity and local-level costs and benefits.</p> <p>The PhD student will enter a team of tens of researchers and doctoral students from the Department of Earth, Environment and Life Sciences collaborating with a lot of Natural Protected Areas and contributing to the CLOE interdisciplinary programme (https://cloe.dp.unige.it/en/).</p>
<p>Financial support: H2020-MSCA-COFUND-2020 “CLOE - Training to complexity: multidisciplinary approaches to rural and mountain sustainable development and conservation” GA n. 101034449 https://cloe.dp.unige.it/en/fellowship</p>
<p>Tutor’s publications (max 3):</p> <p>Dagnino D., Guerrina M., Minuto L., Mariotti M., Médail F., Casazza G., 2020. Climate change and the future of endemic flora in the South Western Alps: relationships between niche properties and extinction risk. <i>Reg Environ Change</i> 20, 121 (2020). https://doi.org/10.1007/s10113-020-01708-4</p> <p>Lazzaro L, Bolpagni R, Buffa G, Gentili R, Lonati M, Stinca A, Acosta A T R, Adorni M, Aleffi M, Allegranza M, Angiolini C, Assini S, Bagella S, Bonari G, Bovio M, Bracco F, Brundu G, Caccianiga M, Carnevali L, Di Cecco V, Ceschin S, Ciaschetti G, Cogoni A, Foggi B, Frattaroli A R, Genovesi P, Gigante D, Lucchese F, Mainetti A, Mariotti M, Minissale P, Paura B, Pellizzari M, Perrino, E V, Pirone G, Poggio L, Poldini L, Poponessi S, Prisco I, Prosser F, Puglisi M, Rosati L, Selvaggi A, Sottovia L, Spampinato G, Stanisci A, Venanzoni R, Viciani D, Vidali M, Villani M, Lastrucci L, 2020. Impact of invasive alien plants on native plant communities and Natura 2000 habitats: State of the art, gap analysis and perspectives in Italy. <i>J. Env. Man.</i> 2020, 274:111140, https://doi.org/10.1016/j.jenvman.2020.111140.</p> <p>Minuto L., Casazza, Dagnino D., Guerrina M., Macrì C., Mariotti M.G., 2021. Management of an invasive plant in a Mediterranean protected area: the experience of <i>Senecio deltoideus</i> in Italy. <i>Ann. Bot. (Roma)</i> 2021, 11, 1-12, https://doi.org/10.13133/2239-3129/16852</p>