



# 4th World Congress on Agroforestry

20-22 May 2019  
Montpellier, France

## Book of Abstracts



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President of the French Republic



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### Bird abundance and richness in ten Mediterranean agroforestry systems

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Since the last century agriculture is strongly promoting the simplification of the landscape. The LIFE Desert Adapt project is been developed across 1000 hectares in Italy, Spain, Portugal and has the objective of implementing integrative agroforestry-based land use planning and management, and one of the indicators to evaluate the project effectiveness is birds richness and abundance. Here we present the results of the first assessment and explore the relationships with the main vegetation cover types. We established 68 sampling points where we recorded bird abundance and richness. In total we registered 57 bird species, sampling points surrounded by woodlands presented 50 species, while shrublands presented 45 and herbaceous cover presented 32 species. The agroforestry practices that will take place inside the LIFE project are expected to increase the vegetation complexity inside the farms and consequently enhance bird diversity and abundance, as well as will provide useful information to compare the influence of different management decisions for bird communities. However, the species of birds threatened at the Mediterranean level are those linked to open agricultural systems (such as the alaudidae) and to areas with sparse tree cover (e.g. laniidae). The project will then evaluate the effects of agroforestry practices on bird communities in qualitative terms to also determine which of these do not have a negative effect on avifaunistic communities.



**Keywords:** bioindicators, desertification, land use change, shrublands, woodlands.

References:

1. Blondel, J., Ferry, C., Frochot, B., 1970. *Alauda* 38, 55–71.