A model of Sicilian environmentally friendly multifunctional farm for soil protection

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**Abstract.** Roccaforte farm is an example of environmental friendly best practices in inland Sicily. The Asparagus association with walnut represents an added value, in terms of yield, production diversification and high economic value linked with the territory. This work aims at offering a virtuous example of how crop yield can be combined with environmental protection, by enhancing the marginal areas of Sicilian Region. A model of environmentally friendly cultivation of *Asparagus acutifolius* and *Asparagus albus* in association with walnut in a multifunctional farm is described in this work. The methods for the propagation, cultivation and transformation of wild asparagus, as well as the best practices of conservation soil tillage, aimed at reducing soil degradation, i.e. compaction and erosion, are described in this work. These best practices will reduce fuel consumption, keep the active topsoil layer and soil organic matter, increase the water retention capacity and carbon sequestration in the soil and, therefore, reduce the emission of Greenhouse Gases (GHGs), i.e. CO2, into the atmosphere.