

***Boletus edulis* PRODUCTION IN XEROPHILIC AND PIROPHITIC
SCRUBS OF *Cistus ladanifer* AND *Halimium lasianthum* IN
WESTERN SPAIN.**

Oria de Rueda, J. Andrés; Martín, Pablo; Olaizola, Jaime.

*Unidad de Botánica y Micología Forestales. Dpto. de Ciencias
Agroforestales. Escuela Técnica Superior de Ingenierías Agrarias de
Palencia. Universidad de Valladolid. Avda. Madrid, 57. 34004 Palencia.
Spain.*

Key words: *Boletus edulis*, *Cistaceae*, production, scrubs, rural development

Fungal communities in xerophilic and pirophitic scrubs composed by *Cistaceae* plants can reach high economic importance. These shrubs are able to grow in very poor soils and are associated with some of the most important edible ectomycorrhizal species as *Boletus edulis*, *B. aereus*, *Cantharellus cibarius*, *Russula cyanoxantha*, etc. Some species of the *Cistus* and *Halimium* genus can produce large harvests of these appreciate ectomycorrhizal fungi since they are 3-4 years old. *Cistus ladanifer* and *Halimium lasianthum* shrubs cover wide areas in western Iberian Peninsula, both in Spain and in Portugal.

In this work the presence of *Boletus edulis* and *B. aereus* in ecosystems covered with *Cistus ladanifer* and *Halimium lasianthum* was studied along west Spain. Also, an experiment was set up to evaluate edible fungi production of these scrubs in the area of Aliste (Zamora) during the autumn of 2003 and 2004. Fungal production was collected weekly in permanent plots (2*50 m). Both fresh and dry weights were measured.

We observed the presence of *Boletus edulis* and *B. aereus* associated with *Cistus ladanifer* in the provinces of León, Zamora, Salamanca, Ávila and Toledo. Appearance of these fungi associated with *Halimium lasianthum* have been also recorded in dry and poor soils of Zamora, León and Palencia. In the study of Aliste (Zamora), an average production of 36 kg/ha of *Boletus edulis* in *Cistus ladanifer* plots has been observed in 2003.

The ability to produce very valuable fungi by these scrubs since they are 3 or 4 years old, very much before than other ecosystems like *Pinus* or *Quercus* stands, whose production of *Boletus* delayed until they are 40. For this reason *Cistus* scrubs are very interesting according to forest valuation and economics in rural areas, especially for marginal lands and poor countries.