



LIFE12 BIO/IT/000213

LIFE Alta Murgia - Control and eradication of the invasive exotic plant species *Ailanthus altissima* in the Alta Murgia National Park

Duration	From 01/10/2013 to 31/12/2017
Total budget	€1,757,740.00 (EC co-financing 47.34%)
Website	www.lifealtamurgia.eu
Coordinating beneficiary	Consiglio Nazionale delle Ricerche (Italy)
Other partners	CUTFAA – Comando unità per la tutela forestale, ambientale e agroalimentare; ARIF – Agenzia Regionale attività Irrigue e Forestali; Ente Parco Nazionale dell’Alta Murgia (Italy).
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Target species
Ailanthus altissima.

Background and aims
The project aims at eradicating the invasive alien plant species *Ailanthus altissima* from the Alta Murgia National Park, SCI and SPA “Murgia alta” IT9120007. Due to its fast growth, in the past the species was intentionally planted by farmers to quickly have shadow in manor farms and sheepfolds, from where it spread to natural habitats, particularly dry grassland displacing the native flora. Moreover, the species causes substantial damages to historical buildings and precious artifacts such as ancient dry stone walls. The objective of the project contributes to implement the following EU and national legislation:

- EC Habitat and Wild Birds Directives;
- EU biodiversity strategy to 2020;
- Directive on the Sustainable use of pesticides;
- “Atto d’Indirizzo 2012-2014” from Ministry of Environment, in which protection and valorisation of biodiversity in protected areas is a key point;
- “National Strategy on Biodiversity”, in which one of the priority actions is the eradication and control of established IAS as threat to biodiversity in the Natura 2000 sites.

Key measures and relative costs
The main activities are: mapping and eradicating *Ailanthus* in all infested areas, increasing public awareness and knowledge about invasive species, the project issues and its results.
Key measures entail long-term control, awareness raising, monitoring and capacity building.
To remove *Ailanthus* from one ha of highly infested land costs €22,000-€24,000.

Results
The main achieved outcomes are a map of the infestation, an eradication action plan, over 470 treated areas with 152 ha of land recovered from *Ailanthus* infestation. The interventions took into a better status of conservation important natural habitats such as *Quercus* woods and dry grasslands.

Lessons learnt
To eradicate the species you must:

- avoid cutting as *Ailanthus* reacts by producing numerous sprouts, increasing the infestation;
- hand-pull the seedlings with their whole root in the very early stages of development.

The best treatment methods consists of mechanical interventions followed by localized applications of the sys-

temic herbicide glyphosate: cut stumps, spaced cuts with sponge, injection and endotherapy. Late summer or autumn treatments are the most effective to kill suckers and roots. Involvement and sensitization of land owners, farmers and common people in the nature conservation, by informing them on the target species invasiveness and on environmental and ecological risk, is of utmost importance for weed management. That can be done individually or by public events such as practical field demonstrations and seminars. Benefits coming from the IAS control are the training of operators, stakeholders and green job building. All lesson learnt are completely replicable and transferable to other EU countries.

Sustainability of results
Treatments have long-term effects but they need to be repeated, so it is fundamental to complete the treatments, to monitor the environment and to train stakeholders. Alternative funding to continue and sustain the results can be FESR 2014-2020. A project has been proposed but not funded.

Recommendations
Due to the lack of legislation, invasive tree species are considered as other endemic tree species, i.e. forest plants, thus hampering their eradication, but allowing only silviculture practices. As a result, no interventions can be carried out between 15 March and 15 July. Moreover, *Ailanthus* is very abundant along street shoulders, but legislation poses limits in the use of herbicides to control weeds on shoulders, especially in SPAs.

Intervention of eradication of *Ailanthus altissima* in an infested area

