NEOBIOTA

From Ecology to Conservation

4th European Conference on Biological Invasions
Vienna (Austria), 27 - 29 September 2006

Book of Abstracts

compiled by

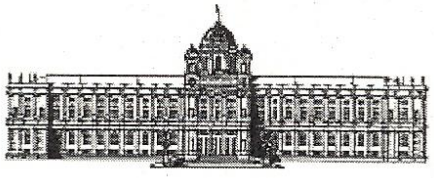
Wolfgang Rabitsch
Frank Klingenstein
Franz Essl

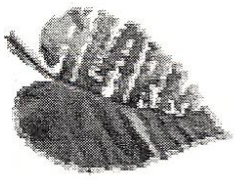
Sponsors:

BfN Federal Agency for Nature Conservation

umweltbundesamt

European Environment Agency





POSTER 10

The ecological profile of the alien flora of Greece and Cyprus: Early results

Bazos I, Delipetrou P, Kokkoris Y, Papacharalambous I, Zikos A, Andriopoulos P, Georghiou K, Yannitsaros A, Arianoutsou M, School of Biology, Univ. of Athens, Greece.

Biological invasions are currently considered as one of the major threats to biological diversity both at regional and at global scale. The alarming increasing number of new incursions and the ecological, economic and even health impacts make plant specifically invasions a high priority subject. The basic knowledge of the ecology and biology of invasive species and the magnitude and extend of invasions is a tool for the control of invasions. Within this framework a survey of the alien plant taxa of Greece and Cyprus was undertaken as part of DAISIE, an ongoing European project, aiming at Delivering an Alien Species Inventory for Europe.

Both Greece and Cyprus are Mediterranean countries with a comparatively high plant species richness and a long history of human influence and plant and animal species trafficking, going at least 9,000 years B.C. back. The alien taxa survey performed was accomplished by thorough investigation of the floristic literature and did not include archaeophytes. Experts' opinion complemented the literature for the determination of the status of the plants, i.e. alien, casual, naturalized or invasive. The data collected concern taxonomy, distribution and origin, habitat, introduction pathway and vector, donor area and common names and were complied in a database compatible with European and International standards.

The number of alien taxa reported so far for Greece and Cyprus, is about 320 and 230 respectively representing close to 5-10% of the extant flora of the two countries. The majority of the taxa recorded belong to the families of Poaceae, Amaranthaceae, Asteraceae, Fabaceae, Solanaceae and Brassicaceae. Their origin is mainly Southamerican, Northamerican, Southwestern European or African but a large number of taxa are of indeterminate origin. Evidently most of the alien taxa have been intentionally or sometimes unintentionally introduced for ornamental, agricultural or amenity reasons. Half of the alien taxa in both countries are naturalized, forming long-term, self-replacing populations and some of them can be considered as invasive. Notably, the majority of the alien taxa grow in disturbed or man-made habitats such as cultivations, road sides, fallow lands and waste deposits and only a limited number intrude natural habitats, mostly wetlands.

It is expected that this study will contribute to better understanding the underlying mechanisms that determine patterns of plant invasions and ultimately it will form a base to orient future plans for monitoring and preventing alien plant invasions both in Greece and Cyprus.