

How Plant Breeding is organized in Greece

Penelope J. Bebeli¹, Ioannis S. Tokatlidis², Konstantinos Bladenopoulos³, Anastasios S. Lithourgidis⁴, Andreas Katsiotis⁵, Dimitrios N. Vlachostergios⁶, Filippos A. Aravanopoulos⁷

¹Department of Plant Breeding and Biometry, Agricultural University of Athens, Iera Odos 75, Athens 11855, Greece

²Department of Agricultural Development, Democritus Univ. of Thrace, Orestiada, 68200, Greece

³Cereal Institute, NAGREF, Themi-Thessaloniki, GR-57001, Greece

⁴Department of Agronomy, Aristotle University Farm of Thessaloniki, Themi, 57001, Greece

⁵Department of Plant Breeding and Biometry, Agricultural University of Athens, Iera Odos 75, Athens 11855, Greece

⁶Fodder Crops and Pastures Institute, National Agricultural Research Foundation, Larissa 413 35, Greece

⁷Faculty of Forest Science and Natural Environment, Laboratory of Forest Genetics and Tree Breeding, Aristotelian University of Thessaloniki, Greece

Both public and private sectors are involved in Plant Breeding in Greece. Four public Universities and six Technological Educational Institutes accomplish education in Plant Breeding in relevant Crop Science and Forest Science Departments. All of the above conduct mainly basic research and thus rarely register cultivars. Applied breeding research is mostly performed by the National Agricultural Research Foundation (NAGREF) Institutes, focusing on cereals, forages, pulses, cotton, vegetables, fruit-tree breeding, as well as breeding of the most important conifer and perennial forest woody angiosperm species in Greece. NAGREF have registered many important cultivars through the past decades. Greek landraces were among the materials used for developing cultivars at the national level, along with imported promising material from foreign genebanks or through international research collaborations. For this reason the Hellenic Gene bank plays an indirect, but major, role on plant breeding by collecting, maintaining and preserving indigenous material and old varieties. Hellenic Sugar Industry conducts research on Plant Breeding and has developed and registered several sugar beet varieties. A number of private seed companies in Greece are involved in plant breeding programs and maintain plant varieties registered in the national list. In addition, the Ministry of Rural Development and Food is responsible for regulating plant genetic resources. The Variety Research Institute of Cultivated Plants acts as a controlling service for cultivar registration in the Greek National Catalogue and for cultivar maintenance. Last but not least the Hellenic Society for Genetics and Plant Breeding acts as a link between all people involved in breeding (universities, research institutes and private sector), promoting scientific interaction among plant breeders.