

SCREENING OF ARUNDO DONAX POPULATIONS IN SOUTH EUROPE

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ABSTRACT

200 native populations were collected from various sites over Greece, Italy and France, in order to evaluate their comparative performance and select the most promising ones for future insertion into EU agriculture. In each trial, rhizomes from 40 populations were planted in plots of 3m x 2.5m=7.2 m², in two replications. All the tested populations exhibited high sprouting rates and rapid growth. Yields showed a wide range of variability, due to parameters including population and climatic conditions, such as temperature and precipitation. Yields of more than 20t/ha dry matter have been assessed from the very first growing period by a large number of populations in all sites. Yields at the end of the establishment year ranged from 3 t/ha to as high as 24 t/ha of dry matter, while in the second they ranged from 2.7 to 34.2 t/ha. Moisture content at harvest was rather high for the energy exploitation of the plant and ranged from 48 % to 57 % in all sites.