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SEED GERMINATION OF SEVERAL INVASIVE SPECIES POTENTIALLY USEFUL FOR BIOMASS PRODUCTION OR REVEGETATION PURPOSES UNDER SEMIARID CONDITIONS

ILIAS S. TRAVLOS*

Department of Weed Science, Benaki Phytopathological Institute, 8 Delta st., GR-145 61 Kifisia, Athens, Greece Department of Crop Production, Agricultural University of Athens, 75 Iera Odos st., 11855 Athens, Greece

*e-mail: htravlos@yahoo.gr

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The introduction of several plant species to areas beyond their natural distribution has been a global phenomenon that poses critical problems and challenges for the conservation and management of many agricultural and natural ecosystems. Shrub medick (*Medicago arborea* L.), Spanish broom (*Spartium junceum* L.) and chaste tree (*Vitex agnus castus* L.) are three of the most important native shrubs in arid and semiarid Mediterranean regions, being noxious invasive species for some areas but in some cases remarkably useful for several purposes. An understanding of their seed germination and seedling emergence should prove useful for their management. Laboratory and greenhouse experiments were done to examine the effects of high temperature on seed germination and seedling emergence. Dry heat benefitted (or at high temperatures damaged) seed germination and emergence. This implies potential effects of fire on the dynamics of populations of *M. arborea*, *S. junceum* and *V. agnus castus*, a factor which should be taken into account as fire is a frequent component of Mediterranean-type ecosystems.

Key words: *Medicago arborea, Spartium junceum, Vitex agnus castus*, temperature, invasive weeds, biomass, Vonitsa.