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*Short note*

# On the biological cycle of the gall wasp *Plagiotrochus suberi* Weld 1926 (Hymenoptera: Cynipoidea: Cynipidae) in the circum-Mediterranean region

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Oak gall wasps (Cynipidae: Cynipini: *Plagiotrochus*) that induce galls on *Quercus* reproduce by alternate sexual and parthenogenetic generations (Pujade-Villar *et al*., 2001). However, a few species are obligatory parthenogenetic (Abe, 1998) or show the facultative alternation of generations (Folliot, 1964).

*Plagiotrochus suberi* Weld 1926 is an asexual gall wasp from North America that is found on the biennial branches of cork oaks. The species originates from the circum-Mediterranean region and was introduced to the American continent centuries ago, together with its host, *Quercus suber* L. The general biology of *P. suberi* was described by Bailey and Stange (1966) and Díaz (1973) for California and Argentina, respectively. Zuparko (1996) demonstrated experimentally that *P. suberi* reproduces parthenogenetically in North-America. It was mentioned for the first time in Europe by Bailey and Stange (1966) from material collected by the Swiss entomologist Charles Ferrière in Lugano (Switzerland). *Plagiotrochus amenti* Kieffer 1901 is a sexual gall wasp from Europe described from a catkin gall on a cork oak in Portugal (see the redescription of the sexual adults and the galls by Tavares, 1902). The available data indicate that *P. suberi* and *P. amenti* are morphologically very similar.

We performed studies in which we experimentally terminated the biological cycle of *P. suberi*, starting from the asexual form in the circum-Mediterranean populations. These experiments revealed an alternating life cycle of *P. suberi* in the original area of distribution and in front of the parthenogenetic in the American populations. Although the experimental data and the implications of this reproductive duality are not presented here, our data confirm that *P. amenti* and *P. suberi* are the sexual and asexual form, respectively, of the same species. We conclude that *Plagiotrochus amenti* Kieffer 1901 is the valid name of this species according to the nomenclatorial priority rule and that *P. suberi* Weld 1926 is a junior synonym.

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