



Figure S1. (A) General view of affected pine forests in Cerros Concejiles (Madrid, Spain), with affected pines in the first term. (B) Tree crown detail with defoliated branches. (C) Initial stage of defoliation with dry leaves. (D) Morphological alterations of twig growth and leaves development. (E) Recently dead tree which retain brown leaves. (F) A percentage of dead trees were affected by bark beetles (*Tomicus destruens* and *Orthotomicus erosus*) with high amount of sub-cortical galleries surrounding all the trunk and holes where young beetles have gone.