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Dispersal behavior and long distance flight capacity of *Monochamus galloprovincialis* (Olivier 1795)

Mas H¹, Hernández R², Villaroya M², Sánchez G³, Pérez-Laorga E¹, González E⁴, Ortiz A.², Lencina J L⁵, Rovira J⁶, Marco M⁶, Pérez V², Gil M², Sánchez-García F J⁵, Bordón P¹, Pastor C¹, Biel M J¹, Montagud L¹, Gallego D⁵

¹ *Laboratori de Sanitat Forestal, Servei d'Ordenació i Gestió Forestal, Conselleria d'Infraestructures, Territori i Medi Ambient, Generalitat Valenciana.*

² *Laboratorio de Sanidad Forestal en Mora de Rubielos, Servicio Provincial de Agricultura, Ganadería y Medio Ambiente, Departamento de Agr. Gan. y M.A., Gobierno de Aragón.* ³ *Servicio de Sanidad Forestal y Equilibrios Biológicos, Ministerio de Agricultura, Alimentación y Medio Ambiente.*

⁴ *SILCO S.L.*

⁵ *Departamento de Zoología y Antropología Física, Universidad de Murcia.*

⁶ *Conselleria d'Infraestructures, Territori i Medi Ambient, Generalitat Valenciana*

Email: gsanchez@magrama.es

ABSTRACT

It is intended to evaluate the capacity of long distance natural spread of *Monochamus galloprovincialis* (Olivier 1795), vector of the pathogen Pine Wood Nematode, *Bursaphelenchus xylophilus* (Steiner et Buhner, 1934).

Eight trials of trapping-marking-releasing-recapturing adult individuals have been held in different regions along the east of the Iberian Peninsula during 2009-2011. To catch the adults have been used three different types of traps: Lindgren funnel, Crosstrap and the Torre-LSF prototype, all of them baited with the specific kairomonal-pheromonal attractive of *M. galloprovincialis*. The traps were sited in the sampling areas at different distances from a central point where the insects have been released.

Results show that released mature adults of *M. galloprovincialis* are able to achieve long-distance spread, reaching maximum values of 13600 m and 22100 m. These distances, together with the high percentages of captures recorded above 3000 m (close to 2%) seem to show the low efficiency of quarantine belts (areas cleaned of possible host species) that are been used in the eradicating programmes and in the theoretical isolation of pest free areas.