Supplementary Material for GÜERRI-AGULLÓ, B., R. LÓPEZ-FOLLANA, L. ASENSIO1, P. BARRANCO, L.V. LOPEZ-LLORCA—Use of a Solid Formulation of *Beauveria Bassiana* for Biocontrol of the Red Palm Weevil (*Rhynchophorus ferrugineus*) (Coleoptera: Dryophthoridae) under Field Conditions in SE Spain. Florida Entomologist 94(4):

Fig. 1. *Beauveria bassiana* application to naturally infested canary palms (*Phoenix canariensis*) with *Rhynchophorus ferrugineus* in two palm groves in SE Spain. (a) Catral palm grove (stipe height 1.5-2 m). (b) El Hondo Palms grove (stipe height 1-1.5 m). Palms with X were left untreated. Marked palms in white were RPW infested. Palms marked in green displayed no RPW symptoms. A version of this figure in color is available in the supplementary figures at *http://www.fcla.edu/FlaEnt/fe944.htm#InfoLink1*.

Fig. 2. Visual chart of RPW palm infestation base on empirical observations in this study. Chart shows (1 = no symptoms, 5 = dead palm). (a) Level 1: no symptoms. (b - e) Level 2: notches in leaves (b, e; arrowheads); larvae feeding galleries (c, d; arrowheads) in expanded leaves. (f - g) Level 3: loss of leaf symmetry in palm upper crown. (h - i) Level 4: palm shows no leaves in the upper crown ("mushroom stage"). (j - k) Level 5: palm with all dead leaves or no leaves ("pencil stage"). A version of this figure in color is available in the supplementary figures at *http://www.fcla.edu/FlaEnt/fe944.htm#InfoLink1*.

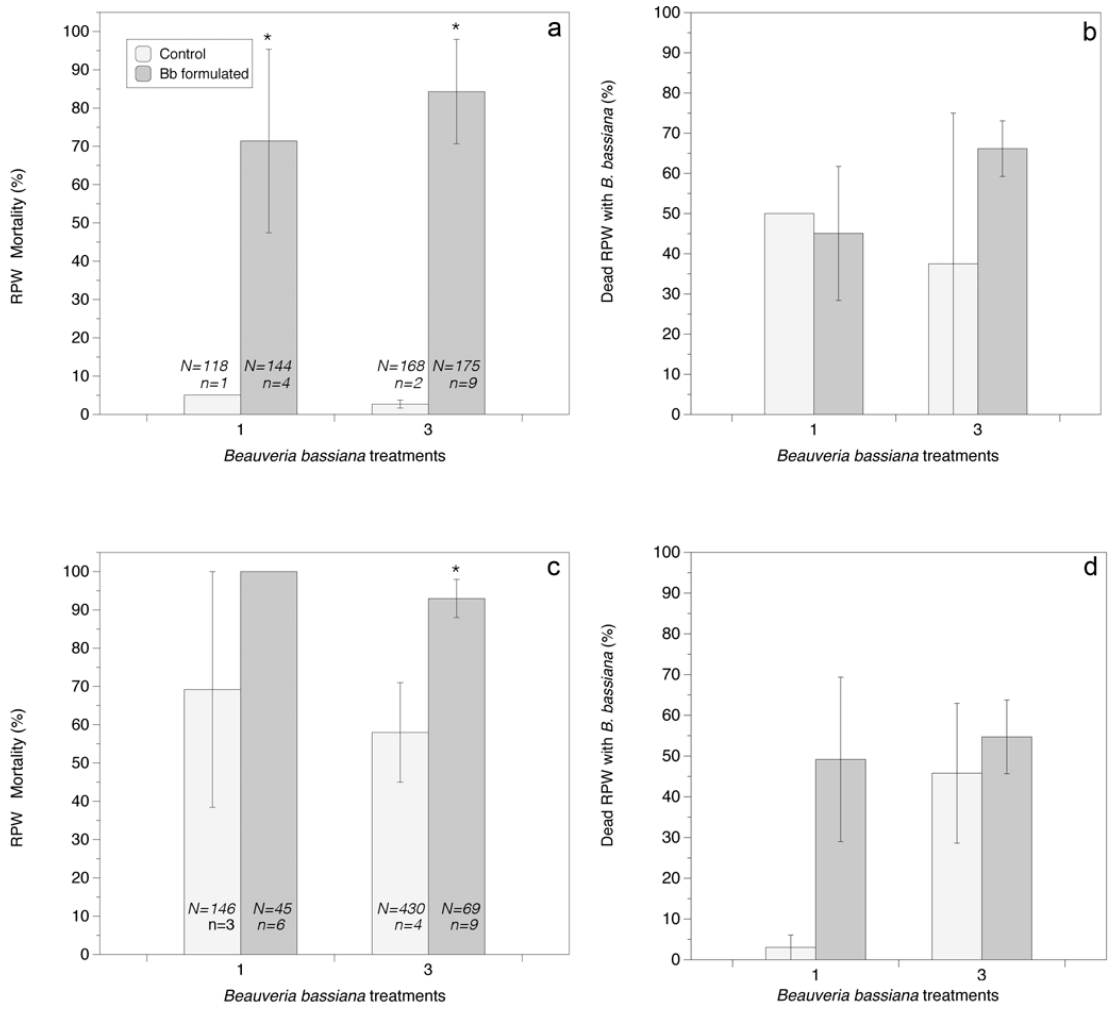

Fig. 3. Effect of *B. bassiana* on *Rhynchophorus ferrugineus* in naturally infested palms in two palm groves in SE Spain. Sites: Catral (a,b), El Hondo (c,d); *n* = no. palms assessed. *N* = sum of the insects present in palms assessed. * Significant Difference (*P* = 0.05). In each of the 4 panels, the bar graphs on the left present the data taken at 3 months post the first application, and the bar graphs on the right present the data taken at 12 months post the first application. Mortality rates are showed in (a) and (c). Dead insects with signs of *B. bassiana* are showed in (b) and (d).

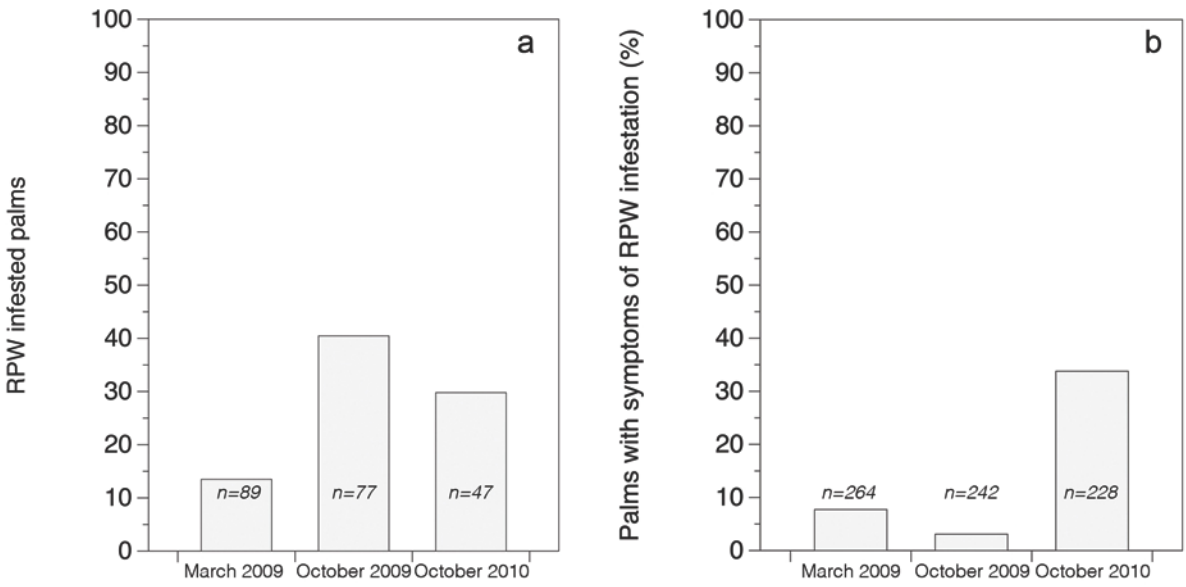

Fig. 4. Effect of *B. bassiana* treatment on RPW infestation in palms of two palm groves: (a) in Catral palm grove, (b) in El Hondo palm grove. RPW infestation before treatment (March 2009), after treatment (October 2009) and twelve months after the last treatment (October 2010); *n* = no. palms assessed.

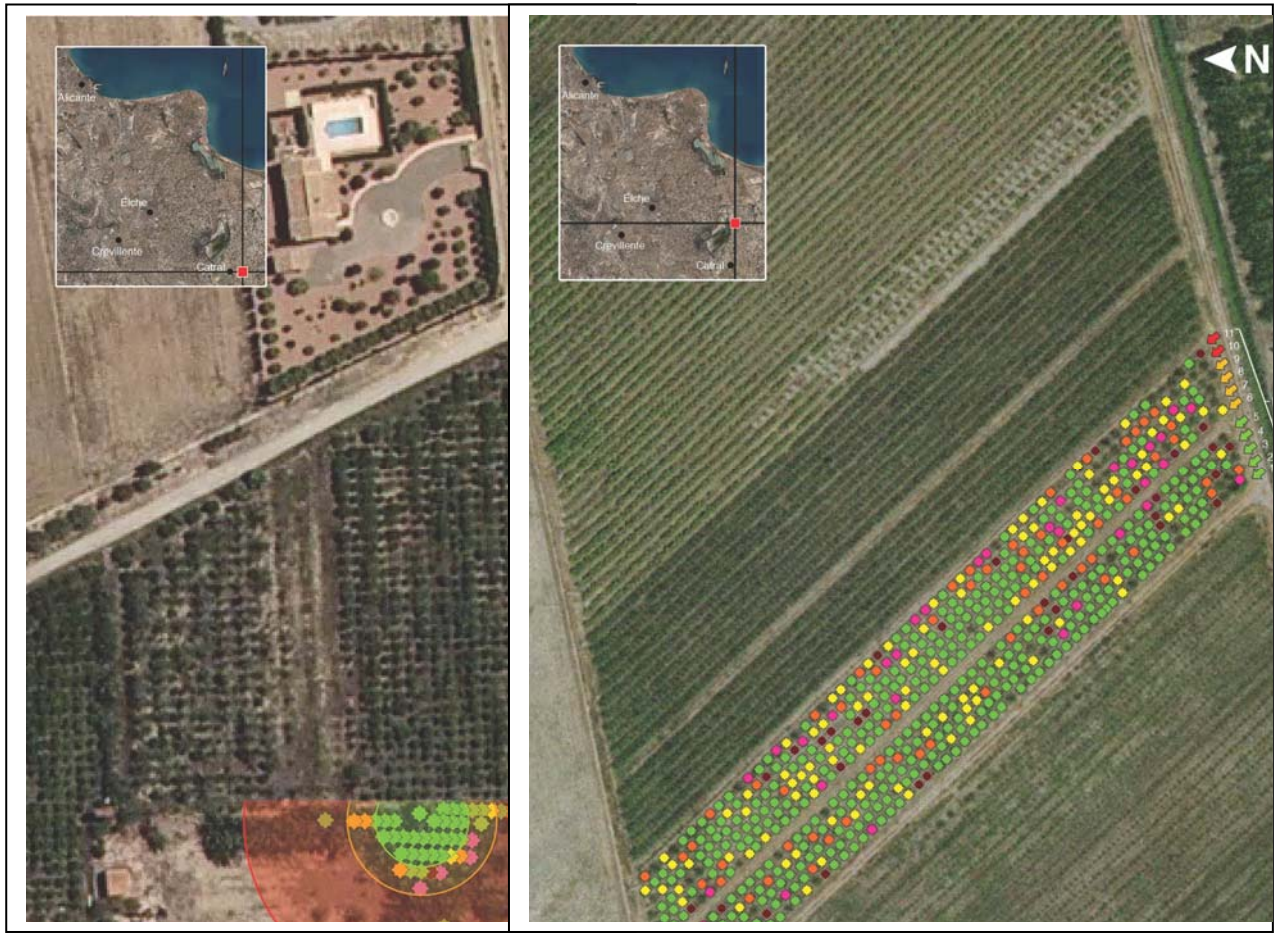

Fig. 5. Long-term (12 months after last application) effect of *B. bassiana* treatment on spatial distribution of RPW infestation in 2 palm groves in SE Spain. (a) Catral. (b) El Hondo. RPW infestation was measured by visual symptom evaluation as in Fig. 2. A version of this figure in color is available in the supplementary figures at *http://www.fcla.edu/FlaEnt/fe944.htm#InfoLink1*.

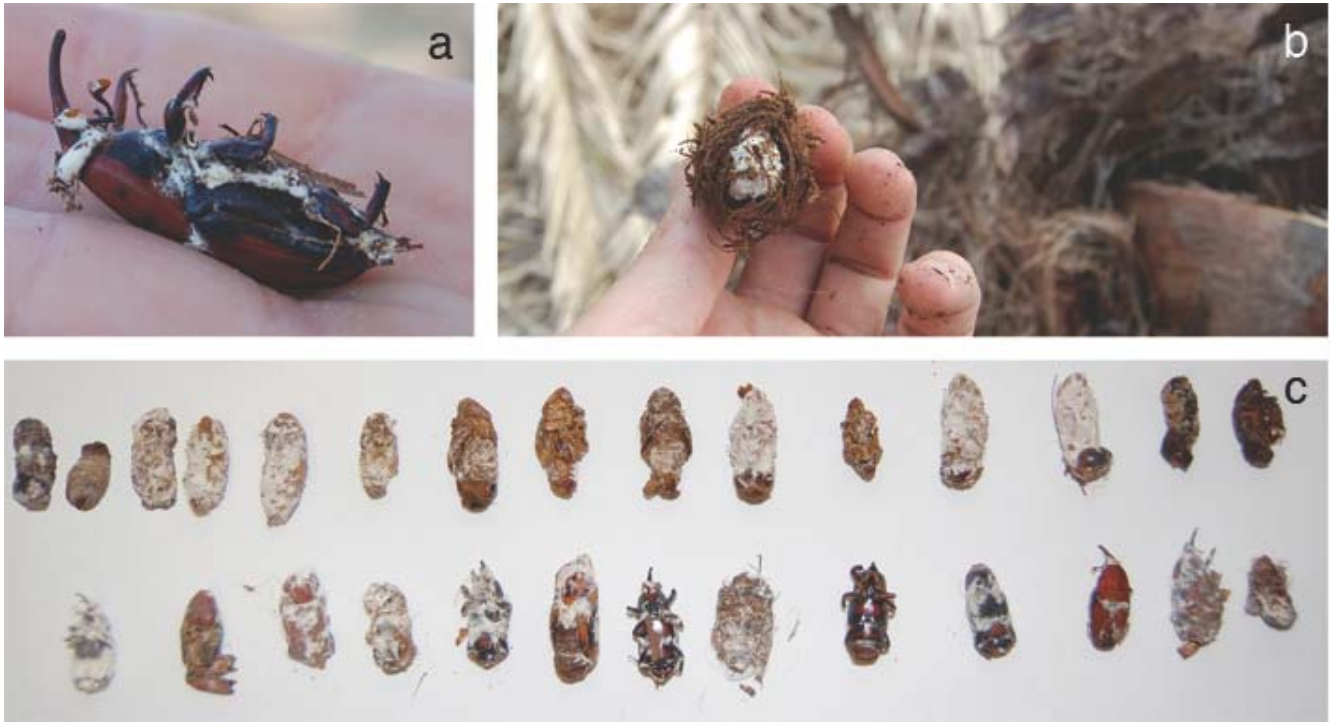

Fig. 6. Detection of *B. bassiana* induced RPW epizootics in Catral palm grove 12 months after last application. (a) RPW infected adult found in *B. bassiana* treated middle zone. (b) RPW infected pupa in untreated zone. (c) Numerous RPW individuals of different stages found infected in *B. bassiana* treated middle zone. For Catral zones see Fig. 5. A version of this figure in color is available in the supplementary figures at *http://www.fcla.edu/FlaEnt/fe944.htm#InfoLink1*.