



# Predictive diffusion of palms pests *Rhynchophorus ferrugineus* & *Paysandisia archon* and perspectives about biological control

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# Predictive diffusion of palms pests *Rhynchophorus ferrugineus* & *Paysandisia archon* and perspectives about biological control

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More than 35 species of palms are actually infested by *Rhynchophorus ferrugineus* & *Paysandisia Archon*, according to the observations of our network of French & Italian Botanical Collections of ca 100 ornamental palm species. Predictive diffusion of these pests may also concern in the future the 2500 species of wild populations of palms in Asia, South America and Africa. The adaptation of these pests to new environments and climatic conditions, and the difficulties to detect early symptoms of infestation, were determining a failure of all eradication and suppression conventional control programs like Integrated Pest Management, based mainly upon the use of chemical or agronomic approaches. Our French & Italian Network is associated with the researches about biological control by Inra (France) & Enea (Italy).

## Our observations about infestation concerning ca 100 ornamental palms *Paysandisia archon* (PA) versus *Rhynchophorus ferrugineus* (RPW)

Acoeloraphe wrightii  
Arenga engleri  
Brahea aculeata, armata, dulcis, edulis  
Chamaerops humilis  
Howea fosteriana  
Jubaea chilensis  
Livistona australis, chinensis, decora (decipiens), saribus  
Nannorrhops arabica  
Phoenix dactylifera, reclinata, robellini, theophrasti  
Sabal bermudana, mauritiiformis, minor, palmetto  
Serenoa repens  
Syagrus romanzoffiana  
Trachycarpus sp: 10 sp/15  
Trithrinax acanthocoma

**TOTAL PA: 35 SPECIES**

Brahea armata & edulis  
Butia capitata & yatay  
Chamaerops humilis  
Howea fosteriana  
Jubaea chilensis  
Livistona chinensis  
Nannorrhops arabica  
Phoenix dactylifera, canariensis, sylvestris  
Sabal mexicana  
Serenoa repens  
Syagrus romanzoffiana  
Trachycarpus fortunei  
Trithrinax campestris  
Washingtonia filifera & robusta

**TOTAL RPW: 19 SPECIES**



Figure 1: Phases of the cycle of *Paysandisia archon* from left to right: eggs, larva, cocoon, adults (male above and female below). (Picture kindly provided by Jean-Benoit Peltier, INRA, France)

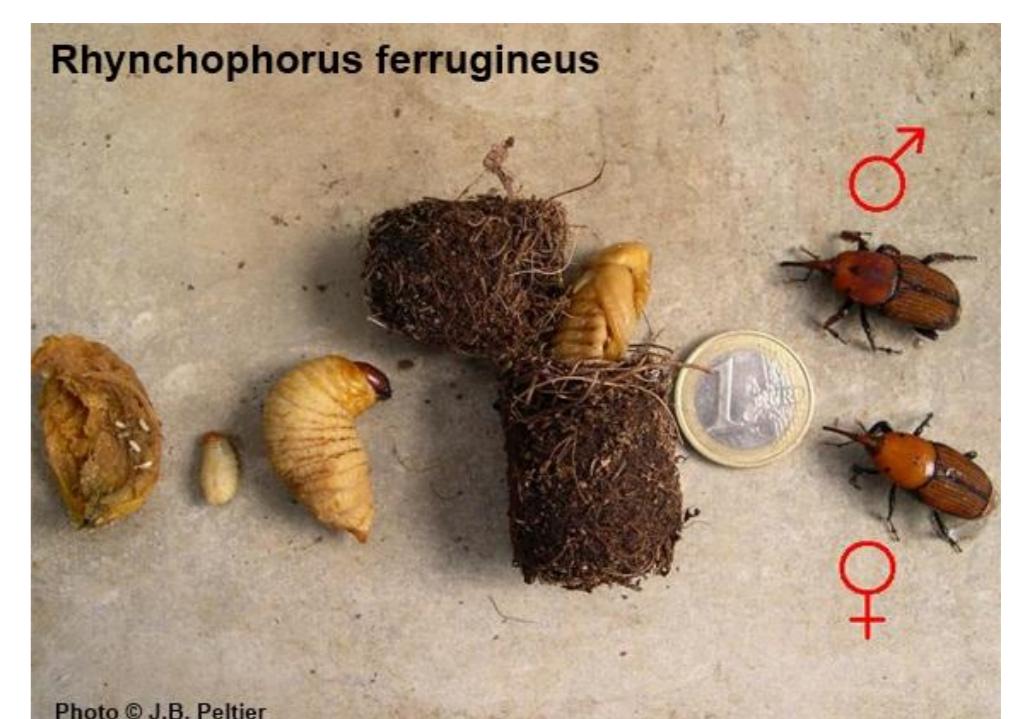


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