EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

04-11063
WPPR Point 13.2

Report of a Pest Risk Assessment

This summary presents the main features of a pest risk assessment which has been conducted on the pest, according to EPPO Standard PP 5/3(1) Pest Risk Assessment Scheme.

Pest:	*Rhynchophorus palmarum*
PRA area:	European Community and Mediterranean countries
Assessor:	Spanish NPPO
Date:	March 2003

1. INITIATION

1.1 Reason for doing PRA: The PRA was initiated because a similar species *R. ferrugineus* was recently introduced into Spain (damage first seen in 1993).

1.2. Taxonomic position of pest: *Insecta Coleoptera Curculionidae Rhynchophorinae*

2. PROBABILITY OF INTRODUCTION

2.1 Entry

2.1.1 Geographical distribution: North America: Mexico. South America: Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Surinam, Uruguay, Venezuela. Caribbean and Central America: Belize, Costa Rica, Cuba, Dominica, El Salvador, Grenada, Guadeloupe, Guatemala, Honduras, Martinique, Nicaragua, Panama, Puerto Rico, St Vincent, Trinidad and Tobago.

2.1.2 Major host plants: *Acrocomia aculeata*, *A. lasiophata*, *A. sclerocarpa*, *Attalea coheme*, *Bactris major*, *Chrysalidocarpus lutescens*, *Cocos nucifera*, *C. coronata*, *C. fusiformis*, *C. romanzofiana*, *C. schizophylla*, *C. vagans*, *Desmoncus major*, *Elaeis guineensis*, *Euterpe braodwayana*, *Guilielma* spp., *Manicaria saccifera*, *Maximiliana caribaea*, *Metroxylon sagu*, *Oreodoxa oleracea*, *Phoenix* spp., *Sabal* spp., *Washingtonia* spp. It can also attack *Gynerium saccharoides*, *Saccharum officinarum*, *Carica papaya*, *Jaracatia dodecaphylla*, *Ananas comosus*, *Musa* spp. and *Ricinus* spp.

2.1.3 Which pathway(s) is the pest likely to be introduced on: Palmae plants for planting (including date palms and ornamental palms) from infested countries.

2.2 Establishment

2.2.1 Crops at risk in the PRA area:	Palms are important trees in the Mediterranean regions both as ornamental plants and date palms (North African countries).
2.2.2 Climatic similarity of present distribution with PRA area (or parts thereof):	Climatic conditions similar to those of origin exist in the PRA area. *R ferrugineus*, a similar species has been introduced in Spain and survives there.
2.2.3 Aspects of the pest's biology that would favour establishment:	The pest has most of its life cycle inside the palm trees, control of the pest is very difficult. It can have up to 3 generations per year.
2.2.4 Characteristics (other than climatic) of the PRA area that would favour establishment:	Some natural enemies exist in the area of origin of the pest but they are not present in Spain.
2.2.5 Which part of the PRA area is the endangered area:	Southern part of the region (Mediterranean countries).

3. ECONOMIC IMPACT ASSESSMENT

3.1 Describe damage to potential hosts in PRA area:	Severely attacked palm trees show a total loss of the palms and rotting of the trunk which lead to the death of the tree. Larvae bore tunnels in the trunk.
3.2 How much economic impact does the pest have in its present distribution:	*R. palmarum* is considered as the most important pest of palms where it occurs. *R. palmarum* is the vector of the nematode *Rhadinaphelenchus cocophilus*, causal agent of the red ring disease which has a very serious economic impact on cultivated palm trees in South and Central America.
3.3 How much economic impact would the pest have in the PRA area:	Date palm is an important crop in North African countries and ornamental palms are widely planted as amenity trees in the whole Mediterranean area.

4. CONCLUSIONS OF PRA

4.1 Summarize the major factors that influence the acceptability of the risk from this pest:	*R. ferrugineus* is a serious pest of palm trees in its region of origin. It has been introduced in Spain in 1995 where it has a limited distribution (phytosanitary measures for eradication and containment). Climatic conditions are favourable in the Mediterranean region. The pest is difficult to detect and may be introduced with imported palm trees. Trade of palm trees from countries where the pest occurs (e.g. Central and South America) has been increasing in the recent years.
4.2 Estimate the probability of entry:	The probability of entry is high. These insects are difficult to detect by simple visual inspections (larvae live inside the plants), and young plants can be infested by eggs or larvae which are also difficult to see.

4.3 Estimate the probability of establishment:	Climatic conditions are favourable to the pest in the Mediterranean region. Probability of establishment is high.
4.4 Estimate the potential economic impact:	The economic impact on ornamental palm and date palm production is medium to high.
4.5 Degree of uncertainty	
5. OVERALL CONCLUSIONS OF THE ASSESSOR	***Rhynchophorus palmarum*** is an important pest in Central and South America. Moreover this weevil is a vector of *Rhadinaphelenchus cocophilus* causing the red ring disease on cocoas. The palms attacked die usually. Due to the fact that the insect can complete its life cycle inside the palm, it is very difficult to eradicate the pest. The pest should be proposed to be listed for regulation.