EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

04-11057 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: PRA area: Assessor: Date:	<i>Rhynchophorus ferrugineus</i> European Community and Mediterranean countries Spanish NPPO March 2003
1. INITIATION	
1.1 Reason for doing PRA:	The PRA was initiated because <i>R. ferrugineus</i> was recently introduced into Spain (damage first seen in 1993). It has also
1.2. Taxonomic position of pest:	Insecta Coleoptera Curculionidae Rhynchophorinae
2. PROBABILITY OF INTRODUCTION	
2.1 Entry	
2.1.1 Geographical distribution:	Egypt (Ismaelyia, Sharkyia governorates), Israel (found in 1999, under eradication), Jordan (found in 1999), <i>R. ferrugineus</i> has a restricted distribution in Spain Spain. The pest is present in Asia from Pakistan eastwards to Taiwan and the Philippines; It is also found in Saudi Arabia and the United Arab Emirates.
2.1.2 Major host plants:	<i>R. ferrugineus</i> is a pest of many palm tree species (<i>Areca catechu, Arenga pinnata, Borassus flabellifer, Caryota maxima, C. cumingii, Cocos nucifera, Corypha gebanga, C. elata, Elaeis guineensis, Livistona decipiens, Metroxylon sagu, Oreodoxa regia, Phoenix canariensis, P. dactylifera, P. sylvestris, Sabal umbraculifera, Trachycarpus fortunei, Washingtonia</i> sp. etc.). It can also attack <i>Agave americana, Saccharum officinarum.</i>
2.1.3 Which pathway(s) is the pest likely to be introduced on: 2.2 Establishment	The pest is likely to be introduced on palm trees.
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	Climatic conditions similar to those of origin exist in the PRA area. In addition the pest has been introduced in Spain and

parts thereof):	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). <i>R. ferrugineus</i> has already be introduced in Spain.
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. Adult females lay eggs in the crown of palm trees, larvae then penetrate the crown and later to most parts of the upper trunk, making tunnels of up to 1 m long. Pupation takes place in a cocoon under the bark. Detection of the pest is difficult in early stages as well as control.
3.2 How much economic impact does the pest have in its present distribution:	<i>R. ferrugineus</i> is a serious pest of palms where it occurs. In Spain it attacks ornamental palm with high economic value. In middle east countries it cause serious damages on date palms.
3.3 How much economic impact would the pest have in the PRA area:	Date palms is an important crop in north African countries and ornamental palms are widely planted as amenity trees in the whole Mediterranean area. The pest would have an impact on nurseries and is threatening palm forests (e.g. Elche palm forest in Spain).
4. CONCLUSIONS OF PRA	
4.1 Summarize the major factors that influence the acceptability of the risk from this pest:	<i>R. ferrugineus</i> 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. Egypt) has been increasing in the recent years.
4.2 Estimate the probability of entry:	The pest has already been introduced. The probability of entry is high.
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 ferrugineus is an important pest in Asia and the Middle East. The palms attacked usually die. 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.