

Report of 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: *Paysandisia archon*
PRA area: European Community and Mediterranean countries
Assessor: Spanish NPPO
Date: March 2005

1. INITIATION

1.1 Reason for doing PRA: The PRA was initiated because *P. archon* was recently introduced into Spain, SE France and Italy (damage first reported in 2001).

1.2. Taxonomic position of pest: *Insecta Lepidoptera Castniidae Castniinae*

2. PROBABILITY OF INTRODUCTION**2.1 Entry**

2.1.1 Geographical distribution: Spain (Catalonia, Comunidad Valenciana and Baleares), France (Herauld, Var) and Italy (Campania, Marche).
P. archon originates from South America. It is found in Argentina, Brazil, Paraguay and Uruguay.

2.1.2 Major host plants: *P. archon* is a pest of many palm tree species (*Brahea armata*, *B. edulis*, *Butia capitata*, *Chamaerops humilis*, *Livistona australis*, *L. chinensis*, *L. decipiens*, *L. saribus*, *Phoenix canariensis*, *P. dactylifera*, *P. reclinata*, *P. roebelenii*, *P. sylvestris*, *Sabal mexicana*, *S. minor*, *S. palmetto*, *Trachycarpus fortunei*, *T. wagnerianus*, *Trithrinax campestris*, *Washingtonia filifera*, *W. robusta*, etc.)

2.1.3 Which pathway(s) is the pest likely to be introduced on: The pest is likely to be introduced on palm trees from countries where it occurs.

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. In addition the pest has been introduced in some regions of France, Italy and Spain, and survives there.

2.2.3 Aspects of the pest's biology that would favour establishment: As *P. archon* has most of its life cycle inside the palm trees, its detection and control is very difficult.

2.2.4 Characteristics (other than climatic) of the PRA area that would favour establishment:

2.2.5 Which part of the PRA area is the endangered area:

Because of the generally mild climate of the PRA area and the widespread use of palm trees as decorative plants, the whole PRA area is at risk.

3. ECONOMIC IMPACT ASSESSMENT

3.1 Describe damage to potential hosts in PRA area:

Larvae bore galleries within palm stipes. Severely attacked palm trees show a total loss of the palms and rotting of the trunk which lead to the death of the tree. 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:

P. archon is a serious pest of palms where it occurs. In EPPO countries where it has been introduced, it attacks ornamental palm with high economic value.

3.3 How much economic impact would the pest have in the PRA area:

Ornamental palms are widely planted as amenity trees in the whole Mediterranean area. More data is needed on the susceptibility of date palm trees (*Phoenix dactylifera*) to this insect as it is an important crop in certain parts of the EPPO region. 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:

P. archon is a serious pest of palm trees in its region of origin. It has been introduced in France and Spain in 2001 where it has a limited distribution.

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. South America), and within the EU is very important.

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 is medium to high.

4.5 Degree of uncertainty

5. OVERALL CONCLUSIONS OF THE ASSESSOR

The larvae of *P. archon* are palm-borers and therefore control or eradication of this pest is difficult. The affected palms may die as a consequence of a heavy attack; if they survive, retarded growth and/or deformation of the stipe/crown may occur. The pest should be proposed to be listed for regulation.