**EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION**
**ЕВРОПЕЙСКАЯ И СРЕДИЗЕМНОМОРСКАЯ ОРГАНИЗАЦИЯ ПО КАРАНТИНУ И ЗАЩИТЕ РАСТЕНИЙ**
**ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES**

05/11886
WPPR point 12.2

# 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:** *Hesperophanes campestris*

**PRA area:** Non-Asian part of the EPPO region

**Assessor:** EPPO Panel on Quarantine Pests for Forestry, revised Panel Phytosanitary Measures

**Date:** March, 2005

## 1. INITIATION

**1.1 Reason for doing PRA**: Study of the risk of forest pests occurring on the territory of the former USSR for the non-Asian part of the EPPO region

**1.2. Taxonomic position of pest:** *Hesperophanes campestris* Faldermann (Coleoptera: *Cerambycidae*)

## 2. PROBABILITY OF INTRODUCTION

### 2.1 Entry

**2.1.1 Geographical distribution:**

**EPPO region:** Armenia (potential EPPO member), Kazakhstan, Kyrgyzstan, Russia (south-east of European part, Transbaikalia, Eastern Siberia, Far East), Tajikistan (potential EPPO member), Uzbekistan (potential EPPO member)
**Europe**: Russia (south-east of European part)
**Asia:** Armenia, Japan, Northern China, southern Kazakhstan, Northern Korea, Kyrgyzstan, northern Mongolia, Russia (Transbaikalia, Far East), Tajikistan, Uzbekistan
**EU:** Absent
**North America**: Absent
**Central America & Caribbean**: Absent
**South America**: Absent
**Oceania**: Absent

**2.1.2 Major host plants:** *H. campestris* attacks *Malus*, *Morus*, *Sorbus (= Micromeles)*, *Gleditsia*, *Salix*, *Betula*, *Broussonetia* and other fruit and deciduous trees, preferring mainly *Malus* and *Morus*

**2.1.3 Which pathway(s) is the pest likely to be introduced on:**

Because *H. campestris* may be hidden in the wood and therefore difficult to detect, it may be easily transported with untreated wood products moving in trade. The pest may also be carried as a hitchhiker on planting material.
In decreasing order of risk, main pathways for *H. campestris* may be:

1. Packaging wood material
2. Wood
3. Plants for planting (with branches of more than 2,5 cm)

**2.2 Establishment**

**2.2.1 Crops at risk in the PRA area:**

*Malus, Morus, Sorbus (= Micromeles), Gleditsia, Salix, Betula, Broussonetia* and other fruit and deciduous trees. The biggest risk exists for forests, city plantations, ornamental and fruit trees and shrubs.

**2.2.2 Climatic similarity of present distribution with PRA area (or parts thereof):**

Because of climatic conditions in its countries and areas of origin and present distribution, it is most likely to establish in Central and Mediterranean part of the EPPO region where its host plants are important forest, fruit and ornamental trees.

**2.2.3 Aspects of the pest's biology that would favour establishment:**

The pest is polyphagous and genetically adaptable.

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

Host plants are widely distributed within the PRA area. Suitable ecological niches are available throughout the PRA area.

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

The endangered part of the PRA area covers most of Central and Mediterranean areas of the EPPO territory.

**3. ECONOMIC IMPACT ASSESSMENT**

**3.1 Describe damage to potential hosts in PRA area:**

*H. campestris* attacks both stressed and healthy trees of different ages as well as cut trees and wood with bark. This species prefers to attack mature trees and, even in cases when it does not kill them, the infestation results in significant delays of sprouting, advanced leaf shedding, loss of vigour and of wood marketability (because of dense and large galleries made by the larger larvae deep in the wood). It is able to develop in a very dry wood and is an important technical pest of wood in the area of its present distribution.

**3.2 How much economic impact does the pest have in its present distribution:**

*H. campestris* is an important pests of many forest, ornamental and fruit deciduous trees in the region of its present distribution, especially of *Malus, Morus* and *Betula* in riparian woodlands and in shelterbelts, fruit trees in valleys and ornamental and introduced plants in cities plantations. A significant number of beetles attacks the same tree causing its death during 1 or 2 years.

**3.3 How much economic impact would the pest have in the PRA**

Considering the similarity of ecological conditions, the damage in the endangered part of the PRA area could be similar to that

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| **area:** | in the present area of the pest. |

## 4. CONCLUSIONS OF PRA

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| **4.1 Summarize the major factors that influence the acceptability of the risk from this pest:** | This pest<br>• comes from an area with similar climatic conditions to those of the PRA area and could easily establish throughout a large part of it;<br>• can cause serious economic damage there with low possibilities for pest control;<br>• is the pest of many hardwoods, ornamental and fruit trees which are important in the PRA area. |
| **4.2 Estimate the probability of entry:** | high for wood packaging material, low with wood and plants for planting |
| **4.3 Estimate the probability of establishment:** | high |
| **4.4 Estimate the potential economic impact:** | Medium but little possibilities for pest control |
| **4.5 Degree of uncertainty** | There is little uncertainty in this assessment |

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| **5. OVERALL CONCLUSIONS OF THE ASSESSOR** | The endangered part of the PRA area covers most of central and Mediterranean regions of the EPPO territory. The pest entry with wood packaging material and wood have high and low probability correspondingly. The probability of establishment is high. Its impact within the endangered area would be the direct damage to plantations of many forest, city, fruit and ornamental trees and shrubs. *H. campestris* is of limited distribution in the EPPO region (south-east of European Russia, Kazakhstan, Kyrgyzstan, Caucasian and Central Asian potential EPPO countries). Possibilities of the pest control are very limited. Phytosanitary measures could prevent its introduction into the endangered area.<br><br>*H. campestris* is proposed for the A2 list. |