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

02/9322 WP PR Point 14.1.3

Tetropium gracilicorne 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: Tetropium gracilicorne

PRA area: The European part of the EPPO region
Assessor: EPPO Panel on Quarantine Pests for Forestry

Date: March, 2002

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 western part of the EPPO region

1.2. Taxonomic position of pest: Tetropium gracilicorne Reitter (Insecta: Coleoptera: Cerambycidae)

2. PROBABILITY OF INTRODUCTION

2.1 Entry

2.1.1 Geographical distribution: Europe: absent

Asia: Russia (Siberia Transbaikalia and Far East), Kazakhstan, northern China, northern Japan and northern Mongolia. Probably also

DPR of Korea.

North America: Absent

Central America & Caribbean: Absent

South America: Absent

Oceania: Absent

2.1.2 Major host plants: All available species of spruce, fir, larch and pine, but it prefers *Larix*

gmelinii, Larix sibirica, Pinus sibirica, P. koraiensis, P. sylvestris,

Abies nephrolepis, Picea ajanensis.

2.1.3 Which pathway(s) is the pest

likely to be introduced on:

Larval and pupal stages occur under the bark and in tunnels in the wood. The pathways for transport are, therefore, any commodities of wood (apart from particle wood) and including packing wood. Plants

for planting, especially older plants, could also be infested.

2.2 Establishment

2.2.1 Crops at risk in the PRA

area:

Mainly Pinus sylvestris but also possibly any species of Pinus, Picea,

Larix or Abies.

distribution with PRA area (or parts thereof):

2.2.2 Climatic similarity of present North and centre of the European part of the EPPO region has similar climatic conditions to the area of origin and present distribution of the pest

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

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 is the range of distribution of Pinus sylvestris which covers primarily northern and central parts of the Europe as well as mountain areas of some other countries.

3. ECONOMIC IMPACT ASSESSMENT

3.1 Describe damage to potential hosts in PRA area:

T. gracilicorne mainly attacks trees suffering from some stress but may also occasionally attack almost healthy, mature trees. Successful attacks in the form of egg-laying leads to the death of the trees, and the presence of the larvae reduces the quality of the wood because of the bore holes produced.

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

It is an important pest of conifers and can seriously affect forest health especially when infestation occurs after the effects of defoliating insects

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

Considering the similarity of ecological conditions, the damage in the PRA area should not be less than that in the present area of the pest.

4. CONCLUSIONS OF PRA

4.1 Summarize the major factors that influence the acceptability of the risk from this pest:

This pest

- has already spread to areas outside its natural range (i.e. Kamchatka)
- has been intercepted in Austria in larch wood from Siberia
- comes from an area with similar climatic conditions to the PRA area and causes serious economic damage there;
- could easily establish throughout a large part of the PRA area;
- is a pest of *Pinus sylvestris* which is the most important forest tree in the PRA area.

4.2 Estimate the probability of entry:

high

4.3 Estimate the probability of establishment:

medium to high

4.4 Estimate the potential economic impact:

medium to high

4.5 Degree of uncertainty

It is not known whether T. gracilicorne could attack species of Larix, Abies or Picea in the PRA area. If so, the potential importance is greatly increased

5. OVERALL CONCLUSIONS OF THE ASSESSOR

T. gracilicorne has been shown to be transported in wood consignments from Siberia and it has already been introduced into an area outside its natural range. It should be able to establish in a large part of the PRA area where the climate would be suitable and host plants would be available. It could damage wood and could kill trees of Pinus sylvestris the most important forest tree species in the PRA area. Its effect could be even greater if it proved to be able to attack the species of Picea, Abies and Larix that predominate in the PRA area.

This pest should be included in the EPPO list.