EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

03/10292 (02/9474)

WPPR point 14.2

Report of a Pest Risk Assessment: *Chrysanthemum stem necrosis tospovirus*

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:	*Chrysanthemum stem necrosis tospovirus*
PRA area:	EPPO region
Assessor:	Original PRA: D. Jones, CSL, UK
	Report of the PRA: EPPO Secretariat
Date:	2002-05

1. INITIATION

1.1 Reason for doing PRA:	CSNV was found in 4 nurseries in the Netherlands in 1994-1995 on chrysanthemum cuttings from Brazil (not reported since 1996 and considered eradicated). Growing importance in Brazil. CSNV was also foud in Chrysanthemeum plants in England in November 2002. The affected crop has been subjected to containment and eradication procedures.
1.2. Taxonomic position of pest:	Viruses: *Bunyaviridae*: *Tospovirus*

2. PROBABILITY OF INTRODUCTION

2.1 Entry

2.1.1 Geographical distribution:	EPPO region: eradicated in the Netherlands.
	South America: Brazil (Sao Paulo, Minas Gerais).
2.1.2 Major host plants:	Chrysanthemum and tomato.
2.1.3 Which pathway(s) is the pest likely to be introduced on:	Infected plants for planting of tomato and chrysanthemum.
	Viruliferous thrips (*Frankliniella occidentalis*, *F. schultzei*).

2.2 Establishment

2.2.1 Crops at risk in the PRA area:	Tomato and chrysanthemum.
2.2.2 Climatic similarity of present distribution with PRA area (or parts thereof):	Similar conditions under glasshouse in northern Europe, but also outdoors in the southern Europe.
2.2.3 Aspects of the pest's biology that would favour establishment:	- can be transmitted in plants, seedlings, cuttings.
	- *F. occidentalis* is a vector and is common in many EPPO countries.
	- tospoviruses can be genetically variable.
2.2.4 Characteristics (other than climatic) of the PRA area that would favour establishment:	- has already been introduced in the Netherlands.
	- would require very strong action for eradication.
	- likely to spread quickly where *F. occidentalis* is not intensively controlled.

	- there are large movements of plants for planting of tomato and chrysanthemum in the EPPO region.
2.2.5 Which part of the PRA area is the endangered area:	Whole EPPO region (indoors in the North; both indoors and outdoors in the south).
3. ECONOMIC IMPACT ASSESSMENT	
3.1 Describe damage to potential hosts in PRA area:	
3.2 How much economic impact does the pest have in its present distribution:	CSNV has a growing economic importance in Brazil, where it has spread, on chrysanthemum and tomato. It is now more frequently detected in tomato in Brazil than in the past
3.3 How much economic impact would the pest have in the PRA area:	Yield losses on tomato and chrysanthemum. Impact on chrysanthemum and tomato industry. The extent of damage would depend on the level of infestation of the vectors. It would compare to TSWV.
4. CONCLUSIONS OF PRA	
4.1 Summarize the major factors that influence the acceptability of the risk from this pest:	- Has already been introduced in the Netherlands. - Has been spreading and causing more damage in Brazil. - Tomato and chysanthemum are important crops in the EPPO region. - One of its vectors is widespread in the region.
4.2 Estimate the probability of entry:	High (Score 6-7).
4.3 Estimate the probability of establishment:	High (Score 6-7).
4.4 Estimate the potential economic impact:	Medium (Score 5-6).
4.5 Degree of uncertainty	More details on damage in Brazil are expected.
5. OVERALL CONCLUSIONS OF THE ASSESSOR	CSNV is proposed for the EPPO A1 list