

Report of a Pest Risk Management: *Cucumber vein yellowing virus*

This summary presents the conclusions of the pest risk management which has been conducted on the pest, according to EPPO Standard PP 5/4(1) Pest Risk Management Scheme.

Pest: *Cucumber vein yellowing virus*
Assessor: Bartlett, Husak, Paulsen, Perez
Date: January 2003
PRA area: EPPO

IDENTIFICATION OF THE PATHWAYS**1 Pathways studied in the pest risk management****PATHWAY 1:**

Natural spread. The virus cannot spread on its own. It has to be transmitted by *Bemisia tabaci*. However, the virus is not persistent in its vector (max 6 h). Natural spread is likely to be slow, and to occur mostly at a national level. **Ranking of the pathway: low**

PATHWAY 2:

Plants for planting of cucumber, melon, watermelon and courgette from countries where *Cucumber vein yellowing virus* occurs. **Ranking of the pathway: high**

2 Other pathways

CVYV-infested *Bemisia tabaci* on plants which are not hosts of CVYV: since CVYV does not persist for more than 6 h in its vector, this pathway is very unlikely. It would be possible only for local spread of CVYV. This is more likely to occur where mixed growing systems are used. **Ranking of the pathway: negligible**

Seeds: the PRA and data sheet state that CVYV is not known to be seed-borne (this seems uncertain according to the formulation in the PRA, and might need to be investigated further) **Ranking of the pathway: non existent**

Fruits: fruits are not mentioned in the data sheet, and this pathway has not been studied. Even if the virus could be transported on fruit, there would then be no pathway to infect other plants (the virus needs *Bemisia tabaci* to be transmitted, and *B. tabaci* does not feed on fruit. This pathway has therefore not been studied. Whether fruits can be infected by the virus could nevertheless be clarified with the authors of the PRA. **Ranking of the pathway: non existent or negligible even if it exists**

IDENTIFICATION OF POSSIBLE MEASURES FOR PATHWAYS ¹**Pathway 1: Natural spread**

Measures of containment/eradication applied in countries where the virus occurs would slow down natural spread of the virus. Eradication is more likely to be feasible in countries where the host plants are grown only under protected conditions).

Pathway 2: Plants for planting of cucumber, melon, watermelon and courgette from countries where *Cucumber vein yellowing virus* occurs.*Measures related to consignments*

None has been identified. The virus can be detected by molecular assays, but it is considered that such testing of consignments would not be feasible on a routine basis.

Measures related to the crop or to places of production

- Measures can be applied against *B. tabaci* in order to exclude it (protected conditions screen, precautionary treatments). However, this measure is not considered to be sufficient on its own.

¹in this section elements considered when answering questions number 31 to 37 should be included for each pathway (possible combination of measures, measures not considered as cost effective....)

- Pest-free area for CVYV
- Where the vector does not occur, then crop freedom for CVYV is sufficient. This is either if it does not occur in the whole country or if a certain area is free. The group considered that pest-free place of production and appropriate buffer zone gave suitable guarantee (but area freedom can also be offered as an option).
- Where the vector occurs but it is excluded by other measures (see above), a lower stringency of area freedom can be envisaged (pest-free place of production and appropriate buffer zone)

EVALUATION OF THE MEASURES IDENTIFIED IN RELATION TO THE RISKS PRESENTED BY THE PATHWAYS

CONCLUSION: SELECTION OF MEASURES

| | |
|--|--|
| Plants for planting of cucumber, melon, courgette and watermelon where CVYV and <i>Bemisia tabaci</i> occurs | PC and, if appropriate RC |
| | area freedom for CVYV |
| | or |
| | place of production and appropriate buffer zone freedom for CVYV, <u>and</u> exclusion measures against <i>B. tabaci</i> (protected conditions, screens, precautionary treatments) to be specified in EPPO Phytosanitary Procedure no. |
| | crop freedom for CVYV <u>and</u> place of production and appropriate buffer zone freedom ¹ for <i>Bemisia tabaci</i> |
| | or |
| | crop freedom for CVYV <u>and</u> area freedom for <i>Bemisia tabaci</i> |
| Plants for planting of cucumber, melon, courgette and watermelon where CVYV occurs and <i>Bemisia tabaci</i> does not occur ² | PC and, if appropriate RC |
| | crop freedom for CVYV ³ |
| | or |
| | place of production freedom for CVYV |
| | or |
| | place of production and appropriate buffer zone freedom for CVYV |
| | or |
| | area freedom for CVYV |

Notes:

1- For TYLCV (also *Bemisia*-transmitted and also occurring in some countries in the region), the requirements in EU Directive specify "monthly during the last three months" for *place of production freedom (monthly during last three months) for Bemisia tabaci*.

2- The requirement for countries where the virus occurs but *Bemisia* does not occur is theoretical (at the moment) since all countries where CVYV is known to occur also have *Bemisia tabaci*. It could be envisaged however that the virus could enter a country on plants for planting, and be present in the production due to vegetative propagation of the material.

3- For crop freedom, place of production freedom, place of production and buffer zone freedom and area freedom, the pest risk management provides that all options stricter than the minimum one should also be offered.

APPENDIX

For each possible category of measures in the pest risk management scheme, this table could identify specifically the ones which were considered suitable ("possible" in bold) and the ones which were not suitable (with a brief justification)

The Panel should decide whether such a summary table is useful, and whether it belongs to the pest risk management, or to the report of the pest risk management

| CATEGORIES OF MEASURES | Pathway n° 2 |
|--|--|
| Detection of the pest in consignments by inspection or testing | |
| general visual inspection | not suitable |
| targeted visual inspection | not suitable |
| specified testing | No. Not applicable on a routine basis |
| import under special licence/permit and post-entry quarantine | no |
| Removal of the pest from the consignment by treatment or other phytosanitary procedures | |
| specified treatment | not relevant |
| removal of parts of plants from the consignment | not relevant |
| Prevention of establishment by limiting the use of the consignment | |
| import under special licence/permit and specified restrictions | not relevant |
| Prevention of infestation of the commodity | |
| specified treatment and/or period of treatment (crop) | not possible |
| consignment should be composed of specified cultivars | not relevant |
| specified protected cultivation | measures against the vector (exclusion, treatment) |
| specified age of plant, growth stage or time of year of harvest | not relevant |
| specific handling/packing methods | ? |
| certification scheme | not relevant |
| Establishment and maintenance of pest freedom of a crop, place of production or area | |
| pest freedom of the crop | Only if <i>B. tabaci</i> does not occur at all in the country (which is theoretical at the moment) or if place of production and appropriate buffer zone freedom (or area freedom) for <i>B. tabaci</i> can be maintained) |
| pest-free place of production | |
| pest-free place of production and appropriate buffer zone | only if appropriate measures are applied to exclude <i>B. tabaci</i> from (?)the place of production |
| pest-free area | yes |
| Prohibition | |
| Internal measures | |
| surveillance and/or eradication campaign | no |