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|  |  | E  TC/51/26  **ORIGINAL:** English  DATE: February 6, 2015 |
| INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS | | |
| Geneva | | |

Technical Committee

Fifty-First Session  
Geneva, March 23 to 25, 2015

PARTIAL REVISION of the Test Guidelines for Cucumber (document TG/61/7 Rev.)

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At its forty-eighth session held in Paestum, Italy, from June 23 to 27, 2014, the Technical Working Party for Vegetables (TWV) considered a partial revision of the Test Guidelines for Cucumber on the basis of documents TG/61/7 and TWV/48/32 “Partial Revision of the Test Guidelines for Cucumber (Document TG/61/7)” and proposed to revise the Test Guidelines for Cucumber as follows (see document TWV/48/43 “Report”, paragraph 95):

* Addition of a new characteristic 51 “Resistance to ‘Cucurbit yellow stunting disorder virus’ (CYSDV)” after Characteristic 50 in Chapter 7 “Table of Characteristics” with an explanation for individual characteristics, and to add the Characteristic to Chapter TQ 7 “Additional information which may help in the examination of the variety”

New Characteristic 51 “Resistance to ‘Cucurbit yellow stunting disorder virus’ (CYSDV)”

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 51.   (+) |  | Resistance to “Cucurbit yellow stunting disorder virus” (CYSDV) | Résistance au “Cucurbit yellow stunting disorder virus” (CYSDV) | Resistenz gegen “Cucurbit yellow stunting disorder virus” (CYSDV) | Resistencia al “Cucurbit yellow stunting disorder virus” (CYSDV) |  |  |
| **QL** |  | absent | absente | fehlend | ausente | Burgos, Castro, Corona | 1 |
|  |  | present | présente | vorhanden | presente | Atalaya, Fortyca | 9 |

Ad. 51: Resistance to “Cucurbit yellow stunting disorder virus” (CYSDV)

|  |  |  |
| --- | --- | --- |
| 1. | Pathogen | Cucurbit yellow stunting disorder virus |
| 2. | Quarantine status | yes |
| 3. | Host species | *Cucumber sativus, Cucumis melo, Cucurbita pepo, Citrullus lanatus* |
| 4. | Source of inoculum | CSIC-La Mayora (Spain) |
| 5. | Isolate | CYSDV La Mayora |
| 6. | Establishment isolate identity | - |
| 7. | Establishment pathogenicity | - |
| 8. | Multiplication inoculum |  |
| 8.1 | Multiplication medium | - |
| 8.2 | Multiplication variety | - |
| 8.3 | Plant stage at inoculation | - |
| 8.4 | Inoculation medium | - |
| 8.5 | Inoculation method | - |
| 8.6 | Harvest of inoculum | - |
| 8.7 | Check of harvested inoculum | - |
| 8.8 | Shelflife/viability inoculum | - |
| 9. | Format of the test |  |
| 9.1 | Number of plants per genotype | 20 |
| 9.2 | Number of replicates | 2 |
| 9.3 | Control varieties |  |
|  | Susceptible | (*Cucumis sativus*) Burgos, Castro, Corona |
|  | Resistant | (*Cucumis sativus*) Atalaya, Fortyca |
| 9.4 | Test design | - |
| 9.5 | Test facility | Greenhouse/plastic tunnel/climatic chamber |
| 9.6 | Temperature | - |
| 9.7 | Light | - |
| 9.8 | Season | - |
| 9.9 | Special measures | prevent spread of white-flies. Plants should be covered with a white-fly-proof net in the greenhouse |
| 10. | Inoculation |  |
| 10.1 | Preparation inoculum | - |
| 10.2 | Quantification inoculum | - |
| 10.3 | Plant stage at inoculation | 2-4 weeks |
| 10.4 | Inoculation method | vector (Bemisia white-flies carrying CYSDV) |
| 10.5 | First observation | - |
| 10.6 | Second observation | - |
| 10.7 | Final observations | 1-2 months after inoculation |
| 11. | Observations |  |
| 11.1 | Method | visual |
| 11.2 | Observation scale | symptoms: leaf yellowing |
| 11.3 | Validation of test | evaluation of variety resistance should be calibrated with results of resistant and susceptible controls |
| 11.4 | Off-types | - |
| 12. | Interpretation of data in terms of  UPOV characteristic states |  |
|  | absent | [1] severe symptoms |
|  | present | [9] no or mild symptoms |
| 13. | Critical control points | In the not recommended case of natural infection, the source of inoculum is not controlled. Then, the identity of the virus should be confirmed by PCR or hybridization, because the symptoms may be similar to those caused by other virus. |

Addition of Characteristic 51 to Chapter TQ 7 “Additional information which may help in the examination of the variety”

“[…]

7.3 Other information

7.3.1 Resistance to pests and diseases (please specify races/strains if possible)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | absent | present | not tested |
| (a) | Resistance to Downy mildew (*Pseudoperonospora cubensis*) (Pcu) (char. 47) | [ ] | [ ] | [ ] |
| (b) | Resistance *to Zucchini yellow mosaic virus* (ZYMV) (char. 50) | [ ] | [ ] | [ ] |
| (c) | Resistance to “Cucurbit yellow stunting disorder virus” (CYSDV) (char. 51) | [ ] | [ ] | [ ] |

[…]”

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