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| International Union for the Protection of New Varieties of Plants |  |

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| Technical CommitteeFifty-Ninth SessionGeneva, October 23 and 24, 2023 | TC/59/23Original: EnglishDate: August 30, 2023 |

Partial revision of the Test Guidelines for swede, Rutabaga

Document prepared by an expert from the Netherlands

Disclaimer: this document does not represent UPOV policies or guidance

 The purpose of this document is to present a proposal for a partial revision of the Test Guidelines for Swede, Rutabaga (document TG/89/6 Rev.).

 The Technical Working Party for Vegetables (TWV), at its fifty-seventh session[[1]](#footnote-2), considered a proposal for a partial revision of the Test Guidelines for Swede, Rutabaga (*Brassica napus* L. var. *napobrassica* (L.) Rchb.) on the basis of documents TG/89/6 Rev. and TWV/57/16 “*Partial revision of the Test Guidelines for Swede, Rutabaga*” and proposed the following changes (see document TWV/57/26 “*Report*”, paragraph 74):

1. Revision of characteristic 23 “Flower: production of pollen”
2. Addition of CMS explanation to Ad. 23 “Flower: production of pollen”

 The proposed new wording is presented below. The proposed changes are presented in highlight and underline (insertion) and ~~strikethrough~~ (deletion) in the Annex to this document (in English only).

## Proposed revision of characteristic 23 “Flower: production of pollen”

|  | Stage1)Stade1)Stadium1)Estado1) | English | français | deutsch | español | Example VarietiesExemplesBeispielssortenVariedades ejemplo | Note/Nota |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 23.(\*)(+) | 410-470VS/MS | Flower: production of pollen | Fleur : production de pollen | Blüte: Erzeugung von Pollen | Flor: producción de polen |  |  |
|  |  | absent | absente | fehlend | ausente | Tweed | 1 |
|  |  | present | présente | vorhanden | presente | Magres | 9 |

Proposed addition of CMS explanation to Ad. 23 “Flower: production of pollen”

Ad. 23: Flower: production of pollen

To be tested in a field trial and/or in a DNA marker test[[2]](#footnote-3).

In the case of a field trial, the type of observation is VS. In the case of a DNA marker test, the type of observation is MS.

Field trial:

Examination should be made on fully opened flowers; tapping or shaking the flowering stem will release pollen, which, if present, can be observed on dark colored paper or card. The absence of pollen production is an indication of male sterility. The presence of pollen production is an indication of male fertility.

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| wordml://101.png | wordml://102.png |
|  |  |
| male fertile (pollen present) | male sterile (pollen absent) |

DNA marker test

If the CMS marker is present, the variety is expected to have male sterile flowers (production of pollen absent). In cases where the CMS marker is not present, the variety is expected to have male fertile flowers (production of pollen present).

In case the DNA marker test result does not confirm the declaration in the TQ, a field trial should be performed to observe whether the variety has male sterile (production of pollen: absent) or male fertile flowers (production of pollen: present) due to another mechanism.

[Annex follows]

PROPOSED CHANGES PRESENTED IN HIGHLIGHT
(in English only)

## Proposed revision of characteristic 23 “Flower: production of pollen”

|  | Stage1)Stade1)Stadium1)Estado1) | English | français | deutsch | español | Example VarietiesExemplesBeispielssortenVariedades ejemplo | Note/Nota |
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Proposed addition of CMS explanation to Ad. 23 “Flower: production of pollen”

Ad. 23: Flower: production of pollen

To be tested in a field trial and/or in a DNA marker test[[3]](#footnote-4).

In the case of a field trial, the type of observation is VS. In the case of a DNA marker test, the type of observation is MS.

Field trial:

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In case the DNA marker test result does not confirm the declaration in the TQ, a field trial should be performed to observe whether the variety has male sterile (production of pollen: absent) or male fertile flowers (production of pollen: present) due to another mechanism.

[End of Annex and of document]

1. held in Antalya, Türkiye, from May 1 to 5, 2023, in hybrid format [↑](#footnote-ref-2)
2. The description of the method to test male sterility for *Brassica* (CMS marker) is covered by a trade secret.  The owner of the trade secret, Syngenta Seeds B.V., has given its consent for the use of the CMS marker solely for the purposes of examination of Distinctness, Uniformity and Stability (DUS) and for the development of variety descriptions by UPOV and authorities of UPOV members. Syngenta Seeds B.V. declares that neither UPOV, nor authorities of UPOV members that use the CMS marker for the above purposes will be held accountable for possible (mis)use of the CMS marker by third parties. Please contact Naktuinbouw, Netherlands, to obtain the method and information on the CMS marker for the purposes mentioned above. [↑](#footnote-ref-3)
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