

Technical Working Party for Ornamental Plants and Forest Trees**TWO/55/5****Fifty-Fifth Session****Virtual meeting, June 12 to 16, 2023****Original:** English**Date:** May 15, 2023

ORNAMENTAL VARIETIES OF AGRICULTURAL, FRUIT OR VEGETABLE CROPS*Document prepared by an expert from the United Kingdom**Disclaimer: this document does not represent UPOV policies or guidance*

The annex to this document contains a copy of a presentation “Examinations for ornamental varieties of agricultural, fruit or vegetable crops – a United Kingdom perspective”, to be made by an expert from the United Kingdom, at the fifty-fifth session of the Technical Working Party for Ornamental Plants and Forest Trees (TWO).

[Annex follows]



Examinations for ornamental varieties of agricultural, fruit or vegetable crops – a United Kingdom perspective

Hilary Papworth, United Kingdom

Examining ornamental plants originating from other crop sectors

What is an ornamental plant?

- In searching for novelty and diversity to provide interest for the consumer, the ornamentals industry takes plants from many origins to develop into new commercial products.
- Exploiting variation that was not of interest in the original crop sector to give new characteristics of ornamental value.
- This means that guidelines that were developed in one sector may not have characteristics that enable the newer ornamental types to be described.

How to conduct the DUS test?

- Use the existing TG for the species, adding national characteristics to describe the variation in the new types
- If sufficient experience is gained a revision of the TG can be suggested and new characteristics added

Advantages – The international harmonisation is maintained, all varieties of different types can be compared using descriptions.

Disadvantages – A longer list of characteristics is developed which may not be useful for the varieties tested by different crop sectors.

Example – Sweet Potato (*Ipomoea batatas*)

- Sweet Potato is an important and popular root crop in many countries.
- It is also used as an ornamental plant, primarily for its foliage characteristics.



A UPOV TG exists for the testing of this species



SWEET POTATO
UPOV Code: IPOMO_BAT
Ipomoea batatas (L.) Lam.

The TG for Sweet Potato contains 27 characteristics,

- 1 plant characteristic
- 7 stem characteristics
- 10 leaf and petiole characteristics
- 9 characteristics for the storage root

Development of TG 258/1

- According to the process described in TGP 7, the species was identified as having interest in more than one working party and interested experts from the TWO were invited to take part in drafting.
- Common characteristics were identified and adopted, such as leaf shape and leaf lobing and some leaf colour characteristics.
- However the resulting TG did not succeed in capturing all the variation needed to describe the ornamental types

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Ipomoea batatas* (L.) Lam.. However, additional characteristics may be needed in order to examine ornamental varieties.

DUS testing of Ornamental varieties

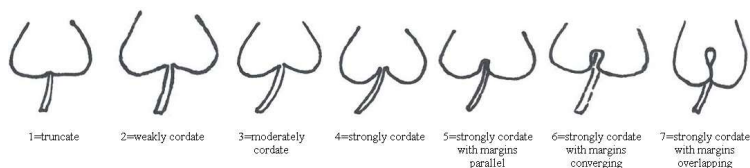
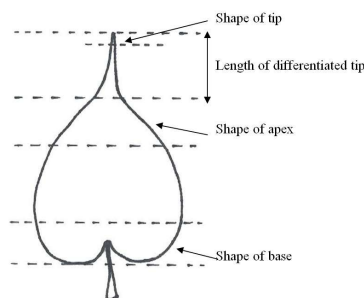
- DUS tests on 21 varieties have been carried out in United Kingdom
- Tests were conducted in glasshouses
- Plants were grown in large containers
- Test was for a single growing season



Examples of additional characteristics for Sweet Potato

Additional leaf shape characteristics

- Leaf blade: length of the differentiated tip
- Leaf blade: shape of tip
- Leaf blade: shape of apex
- Leaf blade: shape of base



Examples of additional characteristics for Sweet Potato

- Additional leaf colour characteristics
 - Leaf blade: main colour of upper surface (RHS Colour Charts)
 - Leaf blade: second colour of upper surface (RHS Colour Charts)
 - Leaf blade: distribution of second colour of upper surface
 - Leaf blade: pattern of second colour of upper surface
 - Leaf blade: third colour of upper surface (RHS Colour Charts)
 - Leaf blade: distribution of third colour of upper surface
 - Leaf blade: pattern of third colour of upper surface



The characteristics for the storage root were not observed

- the roots did not form into tuber that could be reliably or repeatably described under the trial conditions
- The characteristics were not considered important for the description of ornamental varieties



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