## 2022 Rule Proposal \#5

Purpose of Proposal: To add the common name citron-melon in Volumes 1, 3 and 4 for Citrullus amarus.

Present Rule and Proposed Rule: (changes indicated in red text)
Volume 1. Principles and Procedures
Table 2A. Weights for working samples.

| Pure <br> Seed <br> Unit <br> \# | Chaffy Seed ${ }^{\text {a }}$ | Kind of seed | Minimum weight for purity analysis ${ }^{\text {b }}$ | Minimum weight for noxiousweed seed or bulk examination | Approximate number of seeds per gram ${ }^{\text {c }}$ | Approximate number of seeds per ounce ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Grams | Grams | Number | Number |
| 1 |  | Citrullus amarus Schrad. citron, citron-melon | 200 | 500 | 11 | 310 |
|  |  | Citrullus lanatus (Thunb.) Matsum. \& Nakai var. caffer (Schrad.) Mansf. citron, citron-melon | see Citrullus amarus |  |  |  |
|  |  | Citrullus lanatus (Thunb.) Matsum. \& Nakai var. citroides (L. H. Bailey) Mansf. citron, citron-melon | see Citrullus amarus |  |  |  |

Table 6A. Methods of testing for laboratory germination.

| Kind of Seed | Substrata ${ }^{\text {a }}$ | Tempera- <br> ture ( ${ }^{\circ}$ C) | First <br> count <br> (days) | Final <br> count <br> (days) | Specific <br> requirements <br> and notes | Dormant <br> seed $^{\boldsymbol{f}}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Citrullus amarus <br> citron, citron-melon | T, B | $20-30$ | 7 | 14 | Soak seeds 6 <br> hr | Test at $30^{\circ} \mathrm{C}$ |
| Citrullus lanatus var. caffer <br> citron, citron-melon | see Citrullus amarus |  |  |  |  |  |
| Citrullus lanatus var. citroides <br> citron, citron-melon |  |  |  |  |  |  |

Volume 3. Uniform Classification of Weed and Crop Seeds (if adopted, changes will be made to all sections of Vol. 3)

| Nomen \# | Scientific name | Common name | Family | Spp class | CONTAMINATING CLASSIFICATION |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | A | F | H | R | S | T | V |
| 468434 | Citrullus amarus Schrad. | citron; citron-melon | Cucurbitaceae | V | C | C | C | C | C | C | C |

Volume 4. Seedling Evaluation

## CUCURBITACEAE, CUCURBIT FAMILY

Citrullus amarus, citron, citron-melon
Citrullus lanatus subsp. lanatus, watermelon
Cucumis melo, muskmelon or cantaloupe
Cucumis sativus, cucumber
Cucurbita spp., pumpkin and squash

## Harmonization and Impact Statement:

The Federal Seed Act defines Citrullus lanatus (Thunb.) Matsum. \& Nakai var. citroides (L.H. Bailey) Mansf., which according to GRIN is a synonym of Citrullus amarus Schrad., as a vegetable kind with the common name citron melon (a member of the Cucurbitaceae or cucurbit family). This proposal would align the common name for Citrullus amarus with the Federal Seed Act (2020).

The Canadian Methods and Procedures lists citron as the common names for Citrullus lanatus var. citroides (for grade table XVII for various species in Cucurbitaceae or the cucurbit family).

Both citron and citron-melon are used in literature and regulation for the species Citrullus amarus and its synonyms; therefore, both names should appear in the AOSA Rules.

There is some confusion over the common name 'citron' as it also applies to Citrus medica L . (Citrus Citron Group) a member of the Rutaceae or citrus family.

## Supporting Evidence:

Citrullus amarus (citron or citron-melon) is a prostrate summer annual vine producing semispherical fruits resembling small watermelons that is native to southern Africa (Deane, 2021; DiTomaso \& Healy, 2007; USDA-GRIN 2021). The species is grown commercially for the fruit rind that is typically eaten only after cooking, while the white flesh is usually considered inedible. The rind of citron-melon is used in preserves or is candied and used in baked goods (Deane, 2021; DiTomaso \& Healy, 2007; Everett, 1981). When found in commercial watermelon fields, citronmelon is an undesirable field contaminant because it can hybridize with watermelon resulting in production of inferior fruit (DiTomaso \& Healy, 2007).

Synonyms for Citrullus amarus Schrad. (current accepted scientific name according to USDAGRIN, 2021) include Citrullus caffer Schrad.; Citrullus lanatus (Thunb.) Matsum. \& Nakai var. citroides (L. H. Bailey) Mansf.; Citrullus lanatus (Thunb.) Matsum. \& Nakai var. caffer (Schrad.) Mansf.; and Citrullus vulgaris Schrad. var. citroides L. H. Bailey.

Citrus medica (citron) is a woody species and close relative of the orange (Citrus $\times$ aurantium L . var. sinensis L.) and is grown for its fragrant fruits with thick rinds, which are used in jams and marmalades and are candied and used in fruit cakes (Everett, 1981; van Wyk, 2005). The fruit of C. medica looks like a large warty lemon but has a thick rind that represents up to $70 \%$ of the fruit weight (van Wyk, 2005). Fruit of this species is used in Corsica to make the liqueur called ćedratine (van Wyk, 2005).

According to USDA-GRIN (2021) and other sources, the common name citron is most appropriately applied to Citrus medica L. (Citrus Citron Group) (Table 1). Also, according to USDA-GRIN (2021) and other sources the common name citron-melon, as well as fodder melon, preserving melon, stock melon, and tsamma melon are common names applied to Citrullus amarus Schrad. (Table1).

Table 1. Common names for Citrus medica L. and Citrullus amarus Schrad. (and synonyms).

| Scientific Name | Common Name | Source |
| :--- | :--- | :--- |
| Citrus medica L. (Citrus Citron Group) | citron | USDA-GRIN (2021) <br>  <br> Bailey, 1976) |
| Citrus medica | citron | The New Royal Horticultural <br> Society Dictionary of <br> Gardening (Huxley et al., <br> 1992) |
| Citrus medica | citron | Food Plants of the World <br> (van Wyk, 2005) |
| Citrus medica | citron | World Economic Plants <br> (Wiersema \& León, 1999) |
| Citrus medica | citron-melon <br> fodder melon <br> preserving melon <br> stock melon <br> tsamma melon | USDA-GRIN (2021) |

## References

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