

2022 Rule Proposal #18

Purpose of Proposal: To add the species class of Agricultural (A) to Volume 3 for *Vicia faba* to address usage consistent with federal and state regulation. Additionally, insert the common names bell bean, fava-bean, horsebean, and tick bean to Tables 2A and 6A of Volume 1, Volume 3 and Volume 4 as needed for consistency among the AOSA Rules volumes and to address common names found in federal and state regulation.

Present Rule and Proposed Rule: (changes indicated in red text)

Volume 1. Principles and Procedures

Table 2A. Weights for working samples.

Pure Seed Unit #	Chaffy Seed ^a	Kind of seed	Minimum weight for purity analysis ^b	Minimum weight for noxious-weed seed or bulk examination	Approximate number of seeds per gram ^c	Approximate number of seeds per ounce ^d
			Grams	Grams	Number	Number
2		<i>Vicia faba</i> L. Broadbean, fava-bean, horsebean, bell bean, tick bean	500	500		

Table 6A. Methods of testing for laboratory germination.

Kind of Seed	Substrata ^a	Temperature (°C)	First count (days)	Final count (days)	Specific requirements and notes	Dormant seed ^f
<i>Vicia faba</i> broadbean, fava-bean, horsebean, bell bean, tick bean	S, C	20	4	14	See sec/ 6.9c	Prechill at 10°C for 3 days

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
300661	<i>Vicia faba</i> L.	Broadbean; fava-bean; horsebean; bell bean, tick bean	Fabaceae	A, V	C	C	C	C	C	C	C

Volume 4. Seedling Evaluation

FABACEAE, LEGUME FAMILY IV - Large-seeded hypogeal

Cicer arietinum, chickpea

Phaseolus coccineus, scarlet runner bean

Lathyrus hirsutus, rough-pea

Pisum sativum, pea (field or garden)

Lathyrus sylvestris, flat-pea

Vicia faba, horsebean, ~~or~~ broadbean, **bell bean, fava-bean, tick bean**

Lens culinaris subsp. *culinaris*, lentil *Vicia* spp., vetch

Mucuna pruriens var. *utilis*, velvetbean

Vigna angularis, adzuki bean

Harmonization and Impact Statement:

The Federal Seed Act defines *Vicia faba* var. *faba*, broadbean or favabean, as a vegetable kind. The California Seed Law classifies *Vicia faba*, bell bean, fava bean, horsebean or small seeded horsebean, as an agricultural crop and vegetable crop and the classification as a vegetable only applies to varieties generally known and sold under the names of vegetable seeds. The Canadian Methods and Procedures lists broad bean, horse bean, faba bean and tick bean as common names for *Vicia faba* (for grade table V – kinds intended for agricultural field production) and broad bean for *Vicia faba* (for grade table XVIII for species when not intended for agricultural field crop production).

Broadbean, bell bean, fava-bean, horsebean and tick bean are all used in literature and regulation for the species *Vicia faba*; therefore, all these names should appear in the AOSA Rules and be available for users and labeler to use according to the intended use of the *Vicia faba* variety under consideration.

Supporting Evidence:

Vicia faba is an annual species in the pea family (Fabaceae) cultivated for human consumption and as a cover crop. The seed size of this species has a wide range (Figure 1). The common names broadbean and fava-bean are generally used for large-seeded *Vicia faba* grown for human consumption; whereas, the common names bell bean, fava-bean, horsebean, and tick bean are generally used for small-seeded *Vicia faba* grown for animal feed and cover crop.



Figure 1. Size comparison of *Vicia faba* seeds – fava-bean or broadbean (left) and bell bean or horsebean (right).

References

California Seed Law: https://www.cdfa.ca.gov/plant/pe/nsc/docs/seed/SeedLaw_2020.pdf

Canadian Methods and Procedures for Testing Seed (M&P). 2016 Edition. Canadian Food Inspection Agency.

Federal Seed Act Regulations, Part 201 – Federal Seed Act Requirements. 2020.

USDA-GRIN. 2021. GRIN-Global U.S. National Plant Germplasm System. <https://npgsweb.ars-grin.gov/gringlobal/taxon/taxonomysearch?t=pnlspecies>

van Wyk, B. 2005. Food Plants of the World. Timber Press, Inc. Portland, OR.

Vicia faba: https://en.wikipedia.org/wiki/Vicia_faba (accessed 06 October 2021).

Wiersema, J. H. and B. León. 1999. World Economic Plants. CRC Press LLC. Boca Raton, FL.

Submitted by: Nishit Patel, Purity Subcommittee AOSA Co-chair, nishpatel@pa.gov and Deborah Meyer, Purity Subcommittee SCST Co-chair, dmeyerseeds@gmail.com.

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