Science Societies

Plant Exploration—the 'Why' of the Frank N. Meyer Medal

By Clarice Coyne, past chair of the Frank N. Meyer Medal for Plant Genetic Resources Committee; Georgia C. Eizenga, chair of the CSSA Plant Genetic Resources Division (C-8); Marilyn L. Warburton, CSSA past president; and Shuyu Liu, current chair of the Frank N. Meyer Medal for Plant Genetic Resources Committee and past chair of Division C-8

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Obverse and reverse sides of the Frank N. Meyer Medal for Plant Genetic Resources.

In March each year, CSSA accepts nominations for awards that acknowledge outstanding contributions, including the Frank N. Meyer Medal for Plant Genetic Resources. What were Meyer's contributions to American agriculture, and how did this award start? Both answers tell a unique story in our U.S. agricultural heritage.

Frank Meyer (born Frans Nicholas Meijer) was a Dutch-American horticulturalist hired by the USDA in 1901 at the Santa Ana, CA Plant Introduction Station. The USDA Office of Seed and Plant Introductions, led by David Fairchild, was initiated in 1898 to augment U.S. agriculture with cultivated plants collected around the world. Fairchild hired Meyer in 1905 to conduct plant explorations in central and eastern Asia, primarily in China. Meyer collected more than 2,500 seed and propagules of crops, nut and fruit trees, and horticultural specimens. Examples are listed in Figure 1.

Meyer conducted four major collection trips over 12 years between 1905 and 1918. He traveled to China and then Manchuria and eastern Siberia between 1905–1908. Travel in these countries, was arduous, primarily using animal-powered carts, and packing the collected material for the long voyage to the USA was a meticulous process to preserve the propagules. The second expedition of collections was in Europe, Russia, and China between 1909 and 1912. Meyer continued collecting in Russia and China or the third expedition between 1913 and 1915. His ill-fated fourth and final expedition to China stated in 1916 and ended with his untimely death by drowning in the Yangtze River in 1918.

While the original Plant Introduction (PI = Plant Inventory) accessions collected by Meyer are mostly no longer available through GRIN Global, the genetics of his 2,500

plant introductions live on in U.S. agriculture with the extensive distribution of Meyer's collected seed and propagules by the USDA. One of his most famous introductions is the Meyer lemon, still available from commercial nurseries.

Creation of the Medal

In his will, Meyer bequest a sum of $1,000 to his colleagues in the Plant Introduction office "to be used for some outing or entertainment for them." The Plant Introduction staff voted unanimously to use this bequest to create a medal honoring Meyer to award meritorious contribution to plant introductions. The American Genetics Association agreed to present the award, first given in 1920. In 1983, the award duties were turned over to CSSA, and they are now administered by its Plant Genetic Resources Division (C-8).

The obverse side of the medal is a fruiting branch of Chinese jujube and a cone-bearing branch of white-barked pine. The inscription in the center, in Chinese script, reads "In the glorious luxuriance of the natural plants he takes delight" from Chi K'ang poem of the Tang Dynasty. The reverse of the medal depicts Egyptian Queen Hatshepsut's plant expedition in 1570 B.C.

The Frank N. Meyer Medal for Plant Genetic Resources has been awarded to 79 plant genetic resource heroes over the last 105 years. Nominees can be recognized for outstanding contributions to the exploration and collection of plant genetic resources, evaluation of plant genetic resources, research on the preservation of plant genetic resources, maintenance of plant genetic resources, and administrative foresight and support of national or international plant genetic resource programs. Past recipients of this medal are listed under this award at crops.org/awards/search (or via this direct

link: http://bit.ly/3M8zza6).

18422. VICIA VILLOSA. **Hairy vetch.**

From New York, N. Y. Received through Henry Nungesser & Co., April 23, 1906.

18423. ECHINACEA HELIANTHI.

From Riverton, N. J. Received through Henry A. Dreer (Incorporated), Philadelphia, Pa., April 23, 1906.

Plants obtained for hybridizing experiments.

18424. CANNA sp. **Canna.**

From Guam. Presented by Mr. H. L. W. Costenoble, superintendent of the Guam Agricultural Experiment Station. Received April 23, 1906.

"Seed of the native Guam canna, which grows to a height of 8 feet and produces blossoms uninterruptedly." (*Costenoble.*)

18425. MEDICAGO SATIVA. **Alfalfa.**

From Marblehead, Mass. Received through J. J. H. Gregory & Son, April 23, 1906.

Turkestan.

18426 and 18427.

From Juarez, Chihuahua, Mexico. Presented by Mr. Elmer Stearns, of the Agricultural College and Station. Received April 25, 1906.

18426. ZEA MAYS. **Corn.**

Flint corn from Budapest.

18427. (Undetermined.) **"Tree pea."**

18428. PASSIFLORA sp.

From Tecalitlan, Jalisco, Mexico. Presented by Mr. C. V. Mead. Received April 20, 1906.

18429 to 18458.

From Shanghai, China. Received through Mr. F. N. Meyer, April 28, 1906.

A miscellaneous collection of plants and seeds, the seeds being indicated by the letter "a" following the numbers, as follows:

18429. JUNCUS sp. **Rush.**

From Soochow. "(No. 521.) A variety of matting rush collected near Soochow. They must be grown in muddy soil with 2 to 3 inches of standing water." (*Meyer.*)

18430. JUNCUS sp. **Rush.**

From Soochow. "(No. 523.) The rush from which pith wicks for the Chinese oil lamps are made." (*Meyer.*)

18431. (Undetermined.) **"Kaba."**

From Soochow. "(No. 525.) A new vegetable, said to be very delicious; must be grown in muddy soil with 3 to 4 inches of water." (*Meyer.*)

18432. GYMNOCLADUS CHINENSIS.

From Hanchau. "(No. 202a.) A tall-growing tree with naked branches, bearing heavy pods, which are used by the Chinese as a substitute for soap. Chinese name *Soa Ache.* The tree may be of use as an ornamental tree in the Southern States." (*Meyer.*)

18433. GYMNOCLADUS CHINENSIS.

From Hanchau. "(No. 203a.) A small-podded soap tree; otherwise the same description applies to it as to No. 18432." (*Meyer.*)

18429 to 18458—Continued.

18449. RAPHANUS SATIVUS. **Radish.**

From Shanghai. "(No. 245a.) Seed of a white variety." (*Meyer.*)

18450. ABUTILON AVICENNAE. **China jute.**

From Shanghai. "(No. 246a.) Seed of a fiber-producing plant called *pa-mu.*" (*Meyer.*)

18451. CANNABIS SATIVA. **Hemp.**

From Shanghai. (No. 247a.)

18452. BRASSICA sp.

From Shanghai. (No. 248a.)

18453. CORCHORUS sp.

From Shanghai. "(No. 249a.) Seed of a fiber-producing plant called '*Ching-mu-tse.*' The fiber is used in weaving rush mats." (*Meyer.*)

18454. HORDEUM VULGARE. **Barley.**

From Shanghai. (No. 250a.)

18455. PISUM SATIVUM. **Pea.**

From Shanghai. (No. 251a.)

18456. (Undetermined.)

From Shanghai. (No. 252a.) A mixture of vetches and peas.

18457. TRITICUM VULGARE. **Wheat.**

From Tan-yang. (No. 253a.)

18458. HORDEUM VULGARE NUDUM. **Barley.**

From Tan-yang. "(No. 254a.) Seed of a hull-less barley obtained at Tan-yang near Chinkiang, south of the Yangtze River." (*Meyer.*)

18459 and 18460. GLYCINE HISPIDA. **Soy bean.**

From West Branch, Mich. Received through Mr. Edward E. Evans, May 2, 1906.

18459. *Green.* **18460.** *Early black.*

18461. TRIFOLIUM sp. **Clover.**

From Pretoria, Transvaal. Presented by Prof. J. Burtt Davy, agrostologist and botanist of the Transvaal Department of Agriculture. Received April 30, 1906.

"*Limoru* clover seed from British East Africa, where it grows at an altitude of about 6,000 to 7,000 feet; it also appears to grow well when planted in a dry country." (*Davy.*)

18462. CUCUMIS MELO. **Muskmelon.**

From Cartagena, Colombia. Presented by Mr. Wm. R. Maxon, of San Jose, Costa Rica. Received April 28, 1906.

Seed of the native Cartagena muskmelon.

18463. ANDROPOGON CYMBARIUS.

From Central Madagascar. Presented by M. Derlandlee, of the Madagascar Department of Agriculture, Tananarivo. Received April 27, 1906.

"A good forage plant when young, and the best known of the central Madagascar species. Known by the natives as *Verotsanjy.*" (*Derlandlee.*)

Figure 1. Example of Frank N. Meyer's collected Plant Introductions listed in pages 84 and 86 of Volume 1 of the Plant Inventory book series.

Dig Deeper

For further reading and to view the primary reference for this article, see Frank N. Meyer: Plant Hunter in Asia by Isabel Shipley Cunningham (1984; Iowa State University Press).

For an introduction to the history of the U.S. plant introduction program and early plant collectors, including links to original films, check out The USDA Plant Introduction Program by K.A. Williams and G.M. Volk, available from the Grin-U site at https://grin-u.org/ (or direct link at http://bit.ly/42T69mm). The USDA continues to fund plant explorations through its Plant Exchange Office and the crop-specific Crop Germplasm Committees.
