

SUPPORTING STATEMENT**2024 Census of Horticultural Specialties
OMB No. 0535-0236****B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS**

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection has been conducted previously, include the actual response rate achieved during the last collection.**

The 2024 Census of Horticultural Specialties (CHS) target population consists of all US commercial horticulture operations that produced and sold \$10,000 or more in horticulture crop sales or have the potential to produce and sell \$10,000 or more of the items of interest.

The 2024 CHS sampling frame is comprised of active 2024 NASS list frame records with horticultural control data of interest: bedding plants, potted flowering plants, cut flowers, cut cultivated florist greens, herbaceous perennials, foliage plants, trees, shrubs, ground covers, vines, fruit and nut trees, sod, dry bulbs, greenhouse produced vegetables, commercial vegetable transplants, vegetable and flower seeds, hemp grown under protection, Christmas trees, short term woody crops, aquatic plants, unfinished or prefinished plants, propagation materials, and other nursery or greenhouse plants, including mushrooms and mushroom spawns.

Based on previous CHS sampling frames, the 2024 CHS sampling frame is expected to have approximately 55,500 sampling elements. The 2025 Commercial Floriculture survey (CFS) sampling frame, a subset of the 2024 CHS sampling frame, is comprised of operations with list frame control data for Cut Flowers & Greens. There are 28 individually published 2025 CFS states.

The 2024 CHS sampling frame will be divided into two groups based on the overall horticulture value of sales (VOS) derived from list frame control data:

- Group 1 is defined as operations with at least \$10,000 horticulture VOS, and
- Group 2 is defined as operations with at most \$9,999 horticulture VOS.

The 2024 CHS sampling frame will be stratified – within Group and State - using overall horticulture VOS as a measure of size.

The 2025 CFS sample, a subset of the 2024 CHS, includes all operations with at least \$10,000 in floriculture sales in targeted CFS states and all operations with at least \$100,000 in floriculture sales in non-targeted CFS states. For the 2024 CHS, Group 1 will be sampled at a 100% rate (~29,000 operations) and Group 2 will be sampled at a rate of ~ 40% (~ 11,000 operations).

The 2019 Census of Horticultural Specialties survey response rate is 66.3 percent. This compares to 68.9 percent for the 2014 Census of Horticulture Specialties Survey. [Statistical Methodology Appendix A \[Link\]](#)

2. **Describe the procedures for the collection of information including:**
 - **statistical methodology for stratification and sample selection,**
 - **estimation procedure,**
 - **degree of accuracy needed for the purpose described in the justification,**
 - **unusual problems requiring specialized sampling procedures**

The NASS List Frame will be used to create the sample listing for the 2024 Census of Horticultural Specialties. The sample will be comprised of all operations on the list frame with control data indicating that the operation is reasonably likely to be involved with horticulture Sales $\geq$ \$10,000, plus a sample of records with horticulture sales $<$ \$10,000 including operations that indicate they may have horticultural crops. An attempt to contact every such operation will be made. These operations will then be stratified by horticulture sales data from the list frame and non-response weights will be computed to account for anyone who doesn't respond to the Census of Horticultural Specialties for each stratum. Non-response adjusted weights will be integerized for summarization.

Operations that were not included in the initial sample master can be added to the sample if they meet the new add rule for Horticulture. These operations either began operating after the 2022 Census of Agriculture or they were farming operations at the time of the Census of Agriculture, but since then they have expanded their operation(s) to include one or more of the target crops listed in item 1 above.

All records determined to be “new-adds” will be placed in a single stratum and

given a final summary weight of one (1).

Estimation will occur by simply multiplying individually reported data by the integerized non-response adjusted weight from the Census of Horticulture. Estimates will then be aggregated by State, Region and United States for publication purposes. All estimates will be run through a disclosure algorithm that ensures all published numbers adhere to agency disclosure policies. Any estimate that fails the disclosure test will be suppressed from publication.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

Extensive efforts are used to maximize response and thus reduce the extent of non-response imputation in the census. A public information campaign will again be used for the 2024 Census of Horticultural Specialties. The objective is to make growers aware of the census, its importance to them and to encourage their response. This campaign will work through farm organizations, radio broadcasters, farm press, agribusinesses, and the field and regional offices operated by NASS.

To ensure a high response rate and to eliminate the need for large non-response adjustment NASS will make the questionnaire available by both internet and by traditional mail. NASS will follow up the initial mailing of the questionnaire with a second mailing to non-respondents. Remaining non-respondents will then be attempted by either telephone enumeration or personal visits by one of our field enumerators or Field Office staff. When response cannot be obtained from operations, data will be imputed using the 2022 Census of Agriculture and information from similar operations that responded to the 2024 Census of Horticultural Specialties.

4. Describe any tests of procedures or methods to be undertaken.

There are two major changes and a few minor changes to the questionnaire that have been incorporated into this survey. The survey will now include Hemp and Mushroom sections. The minor changes involve replacing some less popular plants with more popular ones.

NASS conducted approximately nine cognitive interviews of various types of operations that had hemp or mushrooms on their operation(s) in May 2023. The cognitive interviews were to verify the content and the wording of the

questionnaire. Findings were reported and recommendations were made for minor changes to the questionnaire.

The overall procedures and methods to be used for the 2024 Census of Horticultural Specialties are relatively unchanged from past surveys.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Survey sample sizes are determined by the Sampling and Frame Development Section and reviewed and approved by NASS Survey Teams. The Agency's Sampling, Editing and Imputation Methodology Branch, Methods Division; Branch Chief is Andrew Dau, (202) 720-6482.

Survey data are collected, reviewed, and summarized by the Regional Field Offices. Publications are released from the Regional Offices and Headquarters. Survey design and methodology are determined by the Summary, Estimation, and Disclosure Methodology Branch, Methods Division; Branch Chief is Lindsay Drunasky, (202) 720-7675.

Data collection is carried out by NASS Regional Field Offices; Eastern Field Operation's Director is Jody McDaniel, (202) 720-3638 and the Western Field Operation's Director is King Whetstone, (202) 720-8220.

NASS is conducting the 2024 Census of Horticultural Specialties through its Census and Survey Division; the Census Planning Branch Chief is Donald Buysse, (202) 690-8747.

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