

Testimony on Agricultural Research and Extension Needs to Support Cold-Climate Fruit Production and Value-Added Local Foods in North Dakota

Chairperson and Members of the SBARE Committee,

Thank you for the opportunity to speak on the critical agricultural research and Extension needs in North Dakota, particularly regarding the integration and expansion of cold-climate fruit production to support high-quality, value-added local food and beverage products.

North Dakota's unique climate, soils, and resilient communities provide strong potential for an expanded and diversified fruit economy rooted in cold-hardy crops such as aronia, currants, haskap, elderberry, apples, tart cherries, and hardy grapes. These crops are not only viable under our challenging conditions—they are in demand by consumers who increasingly seek locally grown and minimally processed food and beverage products. However, realizing this potential requires strategic investment in research, technical assistance, and market development.

To build a viable cold-climate fruit sector, North Dakota needs:

- 1. Expanded Research on Crop Performance and Management**

Localized research is essential to identify and breed cultivars better suited to our growing zones and to develop best practices for soil health, pruning, pest management, frost mitigation, and irrigation. Many producers lack access to practical, research-based recommendations tailored to North Dakota's conditions.

- 2. Postharvest Quality and Value-Added Processing Support**

Fruits grown in cold climates often have unique phytochemical profiles that enhance nutritional and sensory value. Research into optimized harvest timing, storage, processing methods (e.g., juicing, fermentation, drying, freezing), and preservation of bioactive compounds is needed to support the development of premium value-added products—from tasty nutritional juices and wines to preserves and other foods.

- 3. Infrastructure and Equipment Guidance for Small and Mid-Sized Producers**

Technical guidance and Extension support are necessary for equipment selection, food safety compliance, and efficient processing workflows. Many growers are eager to add value to their crops but lack affordable pathways and vetted models suited to their scale.

- 4. Supply Chain Development and Market Integration**

Local and regional supply chains for cold-hardy fruits remain underdeveloped. Support for aggregation models, co-packing options, cooperative marketing, and institutional purchasing can help producers gain reliable market access and contribute to North Dakota's food economy.

- 5. Workforce and Entrepreneurial Training**

Extension-led workshops and demonstrations on fruit cultivation, food processing, business development, and regulatory navigation are vital. Outreach is significant for rural communities where new economic opportunities can anchor population retention and community vitality.

- 6. Consumer Education and Public Awareness**

Promoting "eat and drink local" initiatives through Extension and public education builds

demand for North Dakota-grown products. These efforts also reinforce nutritional wellness and environmental sustainability.

Investing in these areas will strengthen North Dakota's capacity to produce high-quality, cold-climate fruits and transform them into value-added products that contribute to food security, economic diversification, and community resilience.

I urge this committee to support expanded funding for applied fruit research, Extension programming, and food systems innovation that bridges agriculture, health, and enterprise development. With strategic support, North Dakota can become a leader in cold-hardy fruit production and locally crafted foods and beverages.

Thank you for your time and consideration.

Respectfully submitted,

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