

INNOVATION

A production and processing system for the medicinal plant goldenseal (*Hydrastis Canadensis*) with USDA National Organic Program Certification.

ACCOMPLISHMENTS

- ▶ Development of USDA National Organic Program Certified production, post harvest handling and processing system for goldenseal adaptable to small family farms.
- ▶ Identification of high quality goldenseal germplasm through DNA fingerprinting.
- ▶ Patent-pending process for producing high quality goldenseal products standardized to not only chemical markers but also to biological activity.
- ▶ Establishment of a network of more than 40 small farms producing USDA National Organic Program Certified goldenseal and other medicinal plants.



CULTIVATED GOLDENSEAL

COMMERCIALIZATION

- ▶ Development of research grade goldenseal products suitable for use in NIH sponsored clinical studies in partnership with Clemson University's Institute for Nutraceutical Research.
- ▶ Development of oral care products from goldenseal in partnership with the University of Illinois, Chicago, College of Dentistry.
- ▶ Commitment for additional funding in excess of \$700,000 obtained from Symphony Resource Group, LLC, Branson, MO.

IMPACTS

- ▶ More than 40 small farms are actively producing medicinal plants as a direct result of this work.
- ▶ Income from production and processing of this material is projected to exceed \$1 million per year by the 2007-2008 harvest.
- ▶ Development of sustainable production systems for medicinal plants which results in a reduction of the need for wild collected plants to meet market demand.
- ▶ Goldenseal products produced by this system are certifiable for export under the Convention on International Trade in Endangered Species (CITES).

SBIR COMPETITIVELY AWARDS SMALL BUSINESS GRANTS FOR INNOVATIVE RESEARCH THAT HAS THE POTENTIAL OF SOLVING IMPORTANT AGRICULTURE AND RURAL DEVELOPMENT PROBLEMS.

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