

Project Title: Northern grapes: Integrating viticulture, winemaking, and marketing of new cold hardy cultivars supporting new and growing rural wineries.

Project Type: Coordinated Agriculture Project (CAP)

The emergence of cold hardy, *Vitis riparia*-based wine grape cultivars in the 1990s created a new and rapidly expanding industry of small vineyard and winery enterprises (over 300 wineries, 3,300 acres of grapes, 1300 growers) in more than 12 states in New England, northern New York, and the Upper Midwest, boosting rural economies in those regions. While the North American ancestry of these cultivars confers exceptional climatic adaptation (surviving as low as -40°C) and disease resistance, other challenges to production, processing, and marketing slow their successful commercialization in regional and national markets. Because their growth habit and fruit composition differ from traditional, cold-tender *V. vinifera*-based hybrids, new viticultural and enological practices are needed. Marketing tools are also required to educate consumers unfamiliar with the grapes and the wine styles they produce. Consequently, the long-term viability of these new businesses depends on coordinated research and extension to optimize viticultural, enological (winemaking), business management, and marketing practices. To meet the needs articulated by industry stakeholders, this CAP project uses a holistic systems approach, integrating the SCRI focus areas of production, distribution and processing, and consumers and markets. Objectives targeting optimized viticultural practice, genomic characterization, cultivar evaluation, enological characterization, optimized wine production, marketing strategies, agritourism, and product familiarity and preference are designed to elucidate and build on the relationships between these focus areas. Ultimately, this research will help producers overcome production and marketing constraints and increase the profitability and sustainability of emerging cold climate grape and wine industries in the Midwest and Northeast.