

## Potential Topics for Research Planning Meeting

### General:

What issues need to be addressed to develop strong wineries around cold-climate varieties in the Upper Midwest and Northeast?

Which of these is amenable to focused research objectives?

How are these issues unique to cold-climate varieties and businesses?

### Viticulture

What training systems and cropping levels are most appropriate for *V. riparia*-based varieties?

How do varietal performance and fruit characteristics vary under differing climates and soil regimes?

How do site location/soil fertility/cultivar interactions affect cold hardiness?

How do foliar nutrient levels in these cultivars relate to performance and nutrient management?

What canopy management (eg. shoot positioning, thinning) techniques are suitable and cost-effective for these cultivars?

What vineyard tasks are appropriate for mechanization?

What are appropriate targets (yield, chemistry) for optimizing quality?

What are principal pest and disease concerns and appropriate management tools/strategies?

What vineyard practices increase sustainability?

### Enology/Fruit Chemistry:

What modifications to standard winemaking practices are needed to accommodate these high-acid varieties?

What yeast strains can be used to modify flavor profiles?

What role does ML fermentation play in modifying flavors?

What are characteristic flavors, pigments, phenolic profiles?

How can winemaking practice modify these to produce better products?

What wine styles are appropriate for these varieties?

### Business/Marketing/Regulation:

What are economics of producing these grapes and wines?

What goals (size, variety mix) should new vineyard businesses adopt to establish profitable, sustainable businesses?

What production and product mix targets are appropriate for winery business development?

What is the impact in cold-climate wineries of a short tourist season?

How do state regulations on sales, local content, licensing, or ABC regulations affect profitability?

What marketing strategies does it take to establish a local brand based on these varieties?

How do state wine associations or local marketing cooperatives work to sell more wine?

### Economic development:

What impact do these businesses have on rural development and economic vitality? What factors advance or impede this?