



Please complete and return to Kim Brunson at [kimb@agmgt.com](mailto:kimb@agmgt.com)  
Monday November 8, 2021

**Poster Title:** \_\_\_\_\_

**Poster Category:**

	Vineyard Establishment
	Vineyard Management
	Irrigation
	Economics
	Pests, Diseases, Disorders, Nutrition
	Weather
	Resources (ex. AgWeatherNet, Clean Plant Network)

Name of primary contact/author: \_\_\_\_\_

Primary contact email: \_\_\_\_\_

Required information for each author:

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**Abstract** (no more than 200 words):

Nitrogen fertilization in grapevine is directly related to wine quality. Sufficient high yeast assimilable nitrogen (YAN) in the juice is required for an efficient and complete fermentation. An excess of nitrogen decreases fruit and wine quality, while insufficient nitrogen has a negative effect on vine growth and yield. In this context, it is challenging to choose the right rate, source, timing, and place for fertilizer applications. Grapevines also respond differently to nitrogen sources. Nitrate may repress the production of anthocyanins and tannins, whereas foliar urea applied at veraison might increase YAN. The goal of this study is to better understand the impact of foliar urea application on grapevine physiology and berry quality for red and white cultivars. A field trial is conducted in a commercial Syrah vineyard comparing soil applied liquid UAN 32 (20, 40, 80 lbs N/A, split at bloom and fruit set) and foliar urea (13.4 lbs N/A at veraison). Berry weight, cluster number, yield, TSS, pH, TA and malic acid were not significantly different in 2021. YAN increased with increasing nitrogen supply. YAN in the foliar urea treatment was at the same level as the two high soil UAN 32 treatments. Winemaking and analysis are currently in progress.