*GLYNN, NEIL C., KUHN PAUL, J and RUPPAL DOUG, *Syngenta, 7145 58th Avenue, Vero Beach, FL, 32967. **Evaluation of Graduate A+ for post harvest disease control in sugar beet.**

Storage loss is a major factor influencing productivity in sugarbeets. Losses up to 17% over a 100 day period have been estimated and occur due to respiration and as a result of fungal infections. Although maintaining a healthy sugarbeet crop in the field through best practices (varietal resistance, fungicide applications and cultural practices) mitigate such losses, approaches that can reduce fungal colonization of beets during storage are recieving more attention. Many of the pathogens which colonize sugarbeets in storage are ubiquitous in nature, cause infections of other crops and/ or stored products and have fungicides registered for their control in the field. In this study we explored the efficacy of Graduate A+, a fungicide comprised of Fludioxonil (1.99 lb/gal) + Azoxystrobin (1.99 lb/gal) for the control of storage rot pathogens and its potential to preserve sugar content during storage. Sugarbeets were produced and harvested using standard growing practices in Idaho and Michigan. Fungicide applications were made at a spray volume of 0.5 gal/ton and beets were stored in controlled conditions simulating those in commercial sugarbeet storage piles. Sugar analysis and estimates of fungal colonization were performed on a representative sample of beets taken before storage, on a sub-sample taken after ~1-3 months in storage and at the conclusion of the trials after ~3-4 months in storage. Sugar contents were greater in the Graduate A+ treated samples at both times and pest severities of known storage rot pathogens *Botrytis* sp. and *Penicillium* sp. were reduced compared to the untreated check.

These data highlight the potential of fungicide application to sugarbeets prior to storage as a means of mitigating sugar losses and provide a platform for further studies aimed ultimately at developing directions for use for Graduate A+ in commercial sugarbeets.