



Provides Improved Sunburn Protection on Apples

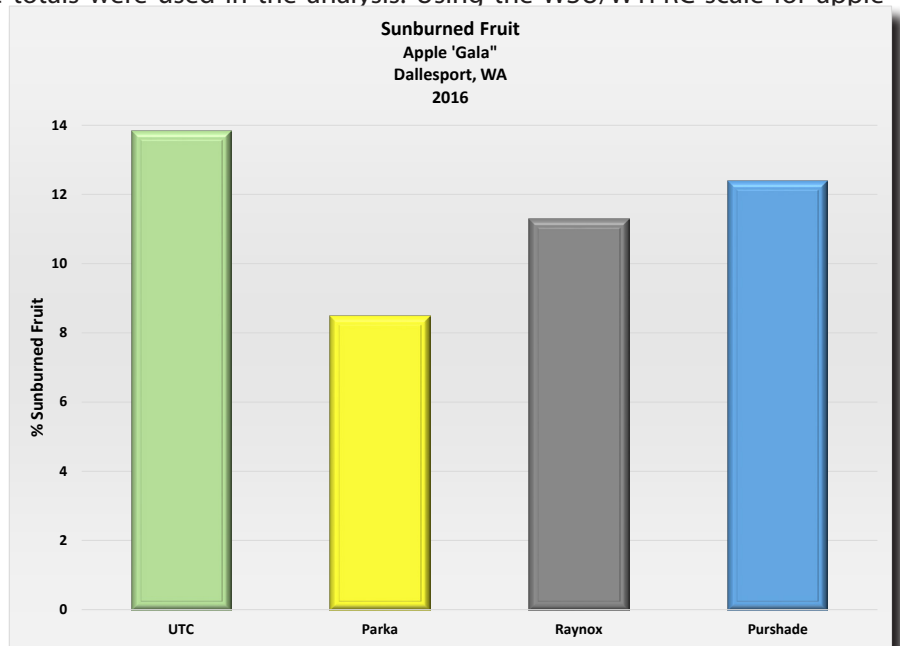
EVALUATION OF PARKA™ FOR MINIMIZING APPLE SUNBURN

Parka™ (A proprietary blend of phospholipids in a cellulosic matrix, Cultiva LLC., Las Vegas, NV) was evaluated for apple sunburn in a commercial apple block of 'Gala' outside Dallesport, WA. Trees used in the trial were 6 year-old bearing trees and were arranged in a randomized block design with 8 single tree reps per treatment. The commercial standards Raynox® (A blend of carnauba wax, organically modified clay and emulsifiers, Valent Biosciences Corporation, Libertyville, IL) and Purshade® (Calcium carbonate 62.5%, Novasource Tessengerlo Group, Phoenix, AZ) were also used in the trial.

Treatments of Parka were applied to trees during early morning on April 24, May 13, June 1, and June 10. Raynox and Purshade were applied in the early morning on June 1, June 10, June 20, July 1, and July 24. The June 10 application was made due to the completion of hand thinning and is a common practice to cover unacclimated fruit. Treatment suspensions were sprayed to coverage with a powered backpack sprayer equipped with a mist blower under calm conditions.

An evaluation was made midday on August 5, the east and west side of the trees were evaluated separately, but due to little to no difference on fruit damage, the totals were used in the analysis. Using the WSU/WTFRC scale for apple sunburn, all fruit in each of the 8 treatment trees were evaluated (1 [slight, but packable] to 5 [necrotic spot]). All treatments showed ~4 necrotic fruit per tree, (data not shown) Averages of 110 fruit were evaluated per tree.

Evaluations showed ~40% reduction of total sunburn comparing the Parka treatment to the untreated control. Raynox showed a 20% reduction compared to the control. Purshade only showed a slight reduction in overall sunburn (See Chart). No statistical differences could be seen across any of the treatments, although a 20 - 40% reduction in overall sunburn can represent many bins of fruit across an acre of orchard. Statistical Analysis of data was completed using ARM (Gylling Data Management Inc., Brookings, SD).



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