

## **Objectives & Rationale**

The South African plum industry has experienced heat damage and sunburn on fruit in recent seasons. Especially the 2015/16 season has resulted in high percentages of fruit being down-graded due to sunburn and heat damage. The latter is often only noticed when fruit are cut when pit burn becomes noticeable. As predictions are that the South African summers will become even warmer and heat wave scenarios can become more extreme, it is expected that the problem might become even worse in future. This has induced some producers to already start covering some plum orchards with shade netting. Orchards that were covered in the 2015/16 season has however shown excessive vegetative growth. Currently no suitable dwarfing rootstocks are available for plums that could combat the excessive growth observed. The aim of the project was to evaluate the effect of shade nets on plum fruit quality at harvest and after cold storage, as well as to evaluate methods to reduce vegetative growth using various plant growth regulators (PGRs).

## **Methods**

Foliar or soil applications of the PGRs were made either at petal drop (PD), PD plus 4 weeks later or after harvest depending on the product. Effect on fruit set, summer pruning and yield and fruit quality were determined. A comparison of fruit quality from untreated trees in full sun were compared to fruit quality from trees grown under shade net, at harvest, after cold storage and after cold storage and subsequent shelf-life.

## **Key Results**

The data is currently still being analysed and results written up and compiled into an MScAgric thesis.

## **Conclusion and Discussion / Recommendation**

Conclusions will only be made once the data analysis is completed.