

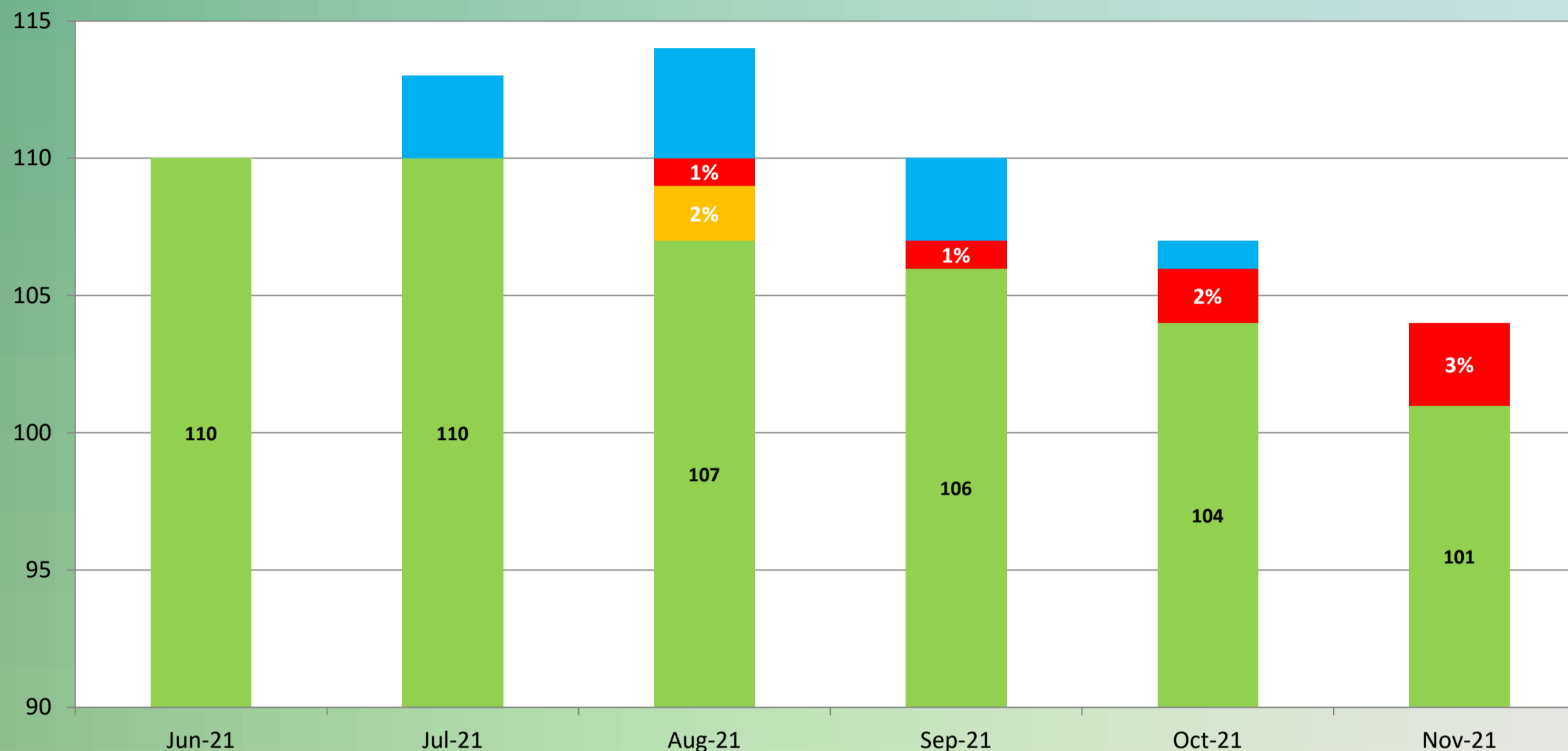


Case Study – BountiGel Applied to New Avocado Trees

Total Trees
(110)

BountiGel-P applied
(50 Grams)

Irrigation Method
(Drip Emitters)



AFFECTED TREES

Trees lost due to heat stress	0%
Trees lost due to disease	2%
Trees lost due to deer	6%
Irrigation Failures	10%
Trees lost due to deer	
Trees lost due to disease	
Trees lost due to heat stress	
Total Trees	

Conclusion

The following application of BountiGel to newly planted avocado trees yielded notable results. Primarily, it underscores the substantial ROI, both in terms of financial capital and time, required for planting new Avocado Trees. The procurement of new trees from Brokaw Nursery, initiated almost two years prior at a cost of \$40 per tree, coupled with the expenses associated with planting and establishing new drip lines, highlights the financial commitment involved.

While BountiGel exhibits the potential to enhance tree growth by facilitating increased nitrogen retention in the root zone and maintaining optimal soil moisture balance, the primary focus of this case study was on BountiGel's efficacy in shielding young trees from heat stress and loss. Remarkably, the results were very positive, as no tree in the study succumbed to heat stress or loss despite a 10% overall failure rate of emitters due to line breaks or clogged emitters, plus three instances of temperatures exceeding 99°F.

From a return on investment (ROI) perspective, factoring in the base cost of a tree (\$40) and the potential revenue loss associated with replacing a deceased tree, the "protection value" of BountiGel emerges as substantial. While the application cost varies based on grove size, applying 50 grams of BountiGel at a base cost of \$0.45 per tree, the potential ROI becomes significant. This calculation considers that, on average, approximately 15-20% of trees are lost due to heat events or irrigation disruptions during the two years after planting.

Lastly, it is noteworthy that a single application of BountiGel yields lasting benefits, extending up to three years from the initial tree planting.