International Fruit Tree Association in New Zealand

Jon M. Clements University of Massachusetts

From late February to early March, 2018 the International Fruit Tree Association (www.ifrtuittree. org) hosted 250 apple growers from around the world on two, 2-week-long Study Tours to New Zealand's North and South Islands. Study Tour attendees overlapped in Napier for a 1-day Annual Conference. I was fortunate

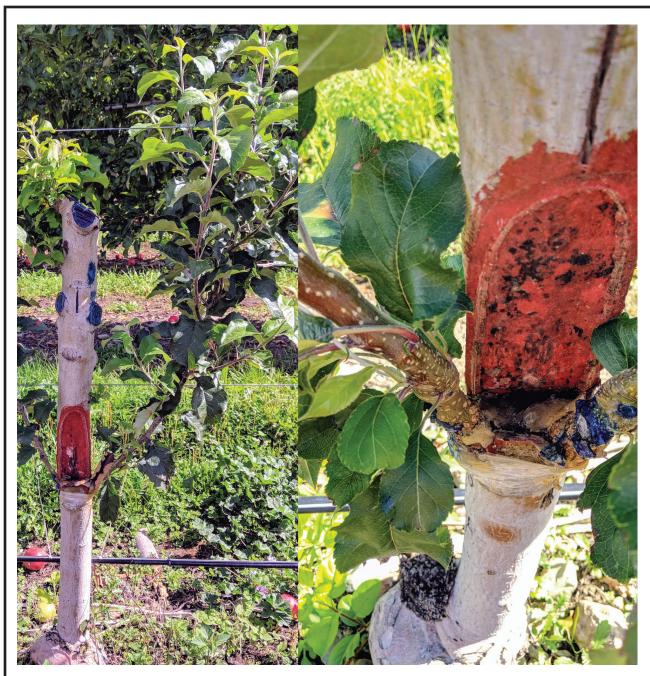
enough to partake in the orchard tours while also enjoying some New Zealand hospitality and sites during the second leg of the tour. Below are just a few of the pictures I took and comments from my notebook. To see more, visit the IFTA Facebook Page (www.facebook.com/IFruitTree/) or search the Twitter hashtag #iftanz



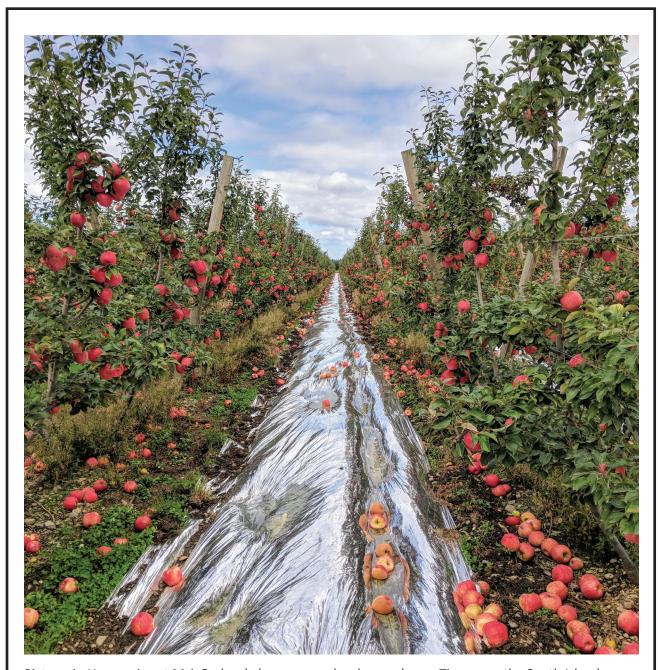
Picture 1. Dr. Stuart Tustin of NZ Plant & Food Research (Havelock North, just outside Napier on the North Island) discusses goals of FOPS (Future Orchard Production System) in this young 'Envy' block. Goals with these cordoned apples include increased light interception (higher yields) and equal light distribution to all fruit (quality fruit). Note that across-row spacing is only about six feet, requiring specialized (TBD) equipment for spraying. Harvest should be accomplished using robotics, or if with people, on very short ladders at the most as tree height will be limited to about eight feet. Planting a tree and growing several (many?) upright fruiting shoots spreads out the vigor so tree height can be minimized, allowing greater management efficiency. Tustin says yields per acre can almost be doubled over more conventional (tall-spindle even) systems because less sunlight falls on the ground where it would be unused to grow apples.



Picture 2. Drape Net demonstration in a young orchard just outside Nelson on the South Island. Drape Net (www.drapenet.com.au) is an alternative to whole orchard hail net/sunburn protection particularly for existing orchards where the infrastructure is not already in place to support more traditional hail netting. A specialized installation/removal piece of equipment that appears to make pretty short work of putting it on and taking it off was demonstrated and is available for purchase. In addition to hail and sunburn protection, Drape Net was also purported to have (some) insect (codling moth in particular) exclusion properties. (What about plum curculio and apple maggot fly?) Drape Net is available in North America here: www.drapenetnorthamerica.com Note also the Extenday fabric in the orchard middle to improve apple red color. Very commonly used in New Zealand.



Picture 3. Interesting method of top-working apple trees where it was desired to have the grafts (bark inlays) down low but retain temporary branching above the grafting location. A diagonal cut is made into the trunk where the new tree is desired to start — in this case a bi-leader tree — and the tree is sawed off several feet above that but leaving some nurse limbs. Grafts are made using dormant scion wood at around bloom (results in best graft take). Once grafts are up and growing rapidly, nurse limbs are removed and then a careful horizontal cut to take the nurse limb section down is made the following season. Hard to describe, but seemed to solve the problem where nurse limbs are higher than the desired grafting/re-start point. This at Easton Apples (www.loveapples.co.nz) in the Nelson (South Island) region. Not sure, but the scion variety might have been Ambrosia, one of Easton Apples favorites.



Picture 4. Honeycrisp at M A Orchards (www.maorchards.co.nz) near Timaru on the South Island. Timaru is two hours south of Christchurch, and was hand-selected by And McGrath (McGrath Nurseries in NZ) and Dave Allan (Allan Bros. in Washington) — hence the name M A — to exclusively grow Honeycrisp (under a license from the University of Minnesota) in New Zealand. Remember, south is cooler in NZ, and a better Honeycrisp growing climate than farther north on the South Island. (Which is kind of tropical actually). Honeycrisp planting began in 2012, primarily on CG.202 rootstock. Eventually production will reach 500,000 boxes, and will be mostly exported as very large, very red, premium Honeycrisp apples. Harvest had just started, and after casual tasting of a few apples, most agreed they were very firm and very flavorful. (Among the best Honeycrisp I have ever tasted!) But, as you can see, fruit drop (push-off?) was a bit of an issue. Note again the use of reflective material, in this case mylarcoated, to improve red color.



Picture 5. The IFTA Study Tour New England contingent in one of M A Orchards Honeycrisp blocks. Left to right: Tim Smith, Apex Orchard; Dana Clark, Clark Bros. Orchards; Gil Garden, Barden Family Orchard; Bruce Carlson, Carlson Orchards; and yours truly. (Yup, I was just listening to Tunes on my iPod!).

