

## Precision Thinning Steps – 2015

| STEP  | STAGE                         | ACTIONS  |
|---|-------------------------------|--|
| 1   | Pre – Pink                    | <ul style="list-style-type: none"> <li>Select Gala and Honey Crisp orchards</li> </ul>   |
| 2   | Pink                          | <ul style="list-style-type: none"> <li>Select 5 representative trees per block</li> <li>Count the total number of flowering clusters and record</li> <li>Tag 15 spurs per tree for measuring fruit after thinning sprays (number tags one through fifteen)</li> <li>Determine total potential fruits</li> <li>Calculate desired number of fruits (<b>SEE Fruit per Tree Excel Spreadsheet Calculator</b>)</li> </ul> |
| 3 (optional)  | 60-80% Full Bloom             | <ul style="list-style-type: none"> <li>Use Carbon Balance Model (NEWA website) to assist with thinning rate determination</li> <li>Spray Thin (see spray thinning chart)</li> </ul>  |
| 4   | Petal Fall (5mm)              | <ul style="list-style-type: none"> <li>Use Carbon Balance Model (NEWA website) to assist with thinning rate determination</li> <li>Spray Thin (see spray thinning chart)</li> <li>Mark calendar for 3 and 8 day measurements</li> </ul>  |
| 5   | 3 Days After Petal Fall Spray | <ul style="list-style-type: none"> <li>Measure fruitlets on tagged spurs with digital calipers – utilize spreadsheet form provided by CCE</li> </ul>   |
| 6   | 8 Days After Petal Fall Spray | <ul style="list-style-type: none"> <li>Measure fruitlets on tagged spurs with digital calipers – utilize spreadsheet form provided by CCE</li> <li><b>SEND Results to Terrence Robinson (<a href="mailto:tlr1@cornell.edu">tlr1@cornell.edu</a>) immediately</b></li> </ul>  |
| <b>Await feedback from Terrence to determine additional spray thinning requirements</b> |                               |  |
| 7   | 12 mm stage                   | <ul style="list-style-type: none"> <li>Use Carbon Balance Model (NEWA website) to assist with thinning rate determination</li> <li>Spray Thin (see spray thinning chart)</li> <li>Mark calendar for 3 and 8 day measurements</li> </ul>  |
| 8   | 3 Days After 12 mm Spray      | <ul style="list-style-type: none"> <li>Measure fruitlets on tagged spurs with digital calipers – utilize spreadsheet form provided by CCE</li> </ul>   |
| 9   | 8 Days After 12 mm Spray      | <ul style="list-style-type: none"> <li>Measure fruitlets on tagged spurs with digital calipers – utilize spreadsheet form provided by CCE</li> <li><b>SEND Results to Terrence Robinson (<a href="mailto:tlr1@cornell.edu">tlr1@cornell.edu</a>) immediately</b></li> </ul>  |
| <b>Await feedback from Terrence to determine additional spray thinning requirements</b> |                               |  |
| 10  | 18 mm stage                   | <ul style="list-style-type: none"> <li>Use Carbon Balance Model (NEWA website) to assist with thinning rate determination</li> <li>Spray Thin (see spray thinning chart)</li> </ul>  |
| 11  | Post final fruit set          | <ul style="list-style-type: none"> <li>Count total fruits per sample trees to determine final results</li> </ul>   |
| 12  | Hand thinning                 | <ul style="list-style-type: none"> <li>Hand thin if fruit counts per tree are higher than target</li> </ul>  |

### Gala Spray Thinning Options by Stage

| Option 1 (includes bloom spray)   | Option 2 (no bloom spray)   |
|---|---|
| <b>Apply a Bloom Spray</b><br>NAA (4oz/100=8oz/acre on Tall Spindle)  |   |
| <b>Apply a Petal Fall Spray (5mm)</b><br>NAA (3oz/100=6oz/acre) +<br>Sevin (1pt/100=2pt/acre)   | <b>Apply a Petal Fall Spray (5mm)</b><br>NAA (3oz/100=6oz/acre) +<br>Sevin (1pt/100=2pt/acre)   |
| <b>Apply a 12 mm Spray</b><br>Maxcel (48oz/100=96oz/acre) +<br>Sevin (1pt/100=2pt/acre)   | <b>Apply a 12 mm Spray</b><br>Maxcel (48oz/100=96oz/acre) +<br>Sevin (1pt/100=2pt/acre)   |
| <b>Apply an 18 mm spray (if needed)</b><br>Maxcel (48oz/100=96oz/acre) +<br>Sevin (1pt/100=2pt/acre) +<br>Oil (1pt/100gal water) <b>don't concentrate oil</b><br>(directed to the upper part of the tree) | <b>Apply an 18 mm spray (if needed)</b><br>Maxcel (48oz/100=96oz/acre) +<br>Sevin (1pt/100=2pt/acre) +<br>Oil (1pt/100gal water) <b>don't concentrate oil</b><br>(directed to the upper part of the tree) |

### Honey Crisp Spray Thinning Options by Stage

| Option 1 (includes bloom spray)  | Option 2 (no bloom spray)  |
|--|--|
| <b>Apply a Bloom Spray</b><br>NAA (4oz/100=8oz/acre on Tall Spindle)   |  |
| <b>Apply a Petal Fall Spray (5mm)</b><br>NAA (4oz/100=8oz/acre) +<br>Sevin (1pt/100=2pt/acre)  | <b>Apply a Petal Fall Spray (5mm)</b><br>NAA (4oz/100=8oz/acre) +<br>Sevin (1pt/100=2pt/acre)  |
| <b>Apply a 12 mm Spray</b><br>NAA (3oz/100=6oz/acre) +<br>Sevin (1pt/100=2pt/acre)   | <b>Apply a 12 mm Spray</b><br>NAA (3oz/100=6oz/acre) +<br>Sevin (1pt/100=2pt/acre)   |
| <b>Apply an 18 mm spray (if needed)</b><br>Sevin (1pt/100=2pt/acre) +<br>Oil (1pt/100gal water) <b>don't concentrate oil</b><br>(directed to the upper part of the tree) | <b>Apply an 18 mm spray (if needed)</b><br>Sevin (1pt/100=2pt/acre) +<br>Oil (1pt/100gal water) <b>don't concentrate oil</b><br>(directed to the upper part of the tree) |