DORMANCY BREAKING
SPRAY TRIAL

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Heidi Parkes and Sally Bound
Can we use dormancy breaking sprays as orchard management techniques to adapt to inadequate chill?

- Stimulate earlier and homogenous bud burst and flowering

<table>
<thead>
<tr>
<th>Galaxy M.26 (WA, QLD, TAS)</th>
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<tr>
<td>+ Waiken™ (5 trees) Methyl Esters of Fatty Acids</td>
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<tr>
<td>+ Dormex® (5 trees) Cyanamide</td>
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<td>Control (5 trees)</td>
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Predicting Chill for the coming season

- Predicting 35 days before Green Tip

- Galaxy Full Bloom
  - 4th Nov 13
  - 20th Oct 14
  - 23rd Oct 15

- EBB 22nd Sept
- Actual BB 23rd Sept

- ANABP 01 Full Bloom
  - 10th Nov
  - EBB 10th Sept
  - Actual BB 25th Sept
Chill portions 2015
Comparison between locations and treatments for Galaxy

Day of Year
Green Tip – First Flower – Full Bloom

Tas
QLD
WA

Control
Dormex
Erger
Waiken
Flowering progression WA

Galaxy Dormex®

Galaxy Waiken™

Galaxy Control

ANABP 01 Dormex®

ANABP 01 Waiken™

ANABP 01 Control

Day of Year
Green Tip – First Flower – Full Bloom
Galaxy
Dormex® advances GT & FB in QLD & WA
Waiken™ advances GT in QLD & WA but only impacts flowering date and duration in QLD
Galaxy
Fruit Set - Not significantly different between treatments in any location
Maturity SPI and yield

- QLD – Advanced by 9 days Dormex®, 5 days Erger & 5 days Waiken™
- WA – Slightly different but not significantly different
- Colour was more intense for Dormex® in WA
Key Findings

- Impacts on bud burst and flowering are likely to vary between seasons.
- No phytotoxicity observed
- Need to consider flowering time of polliniser varieties if spraying blocks of trees.
- Importance of good records of GT& FB
- Treat individual varieties as individuals
Future Research Needed?

• More cultivars
  • Low Chill – Cripps Red
  • Mid Chill – Cripps Pink, Granny Smith
  • High Chill - Fugi

• Different timings
  • predicting 35 days before GT
  • Or can we predict 70% of chill threshold received

• Compare Erger by Valagro to Waiken™ and Dormex®