

A visual guide to assist in Whitefly management

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NOTE: The images and information in this document should be used as a guide only. Whitefly populations may increase faster or slower than normal which could alter the risk of problem honeydew levels. Ensure good, at least weekly, monitoring of populations and honeydew. Consult expert advice if uncertain

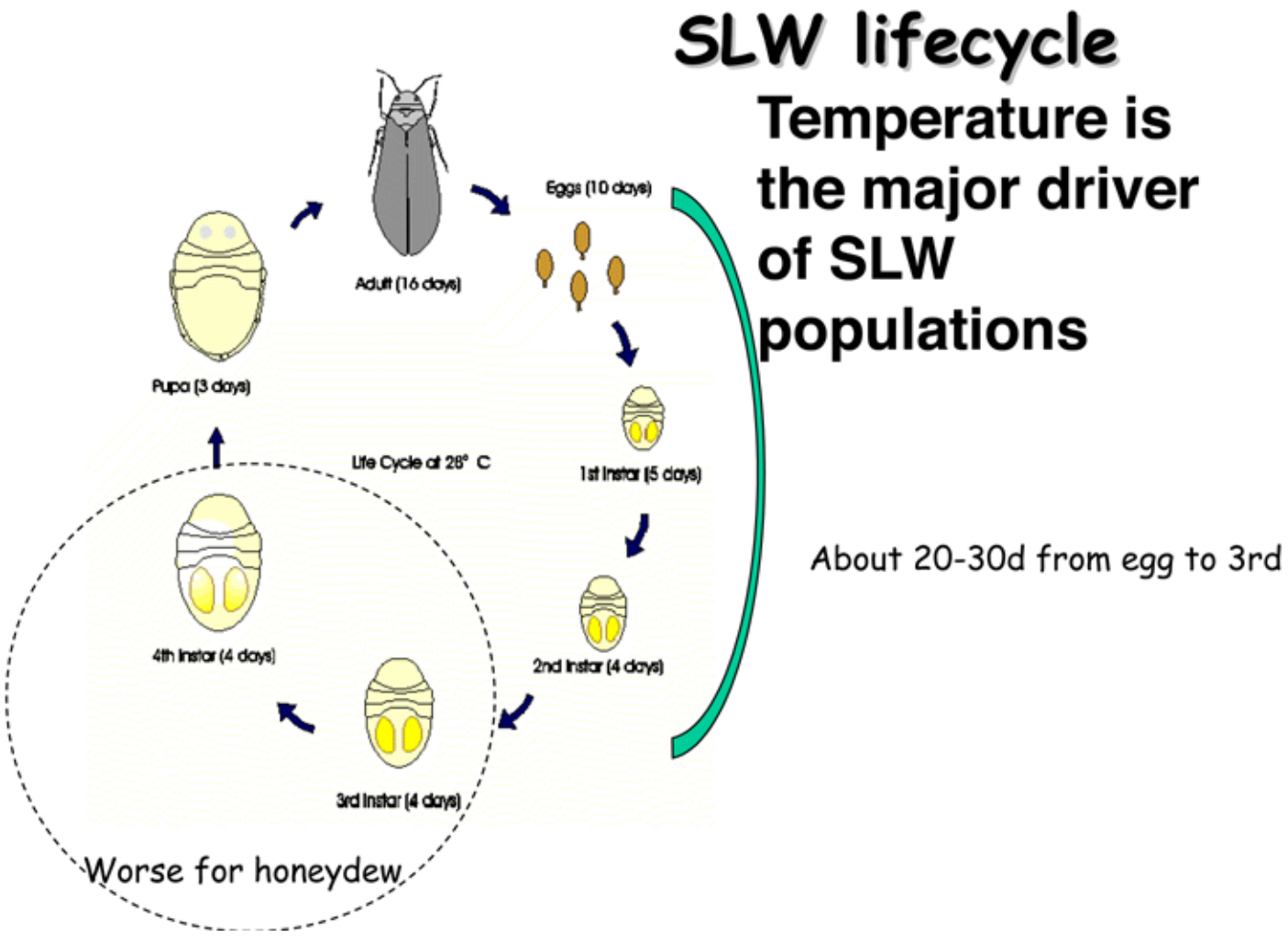
SLW – why is it a problem?

Honeydew contaminated lint

- + sooty mould
- $ penalty – now ($250+)
- reputation – long lasting

Insecticide resistance

- already here
- develops fast
- difficult to control



Strategies

- **Sample effectively – SLW (adults/nymphs) + honeydew**

- Whitefly on upper leaves worse

- **Control**

- Population, time remaining, honeydew

- **Defoliation (60% open but could go at 50%)**

- kills nymphs/adults leave

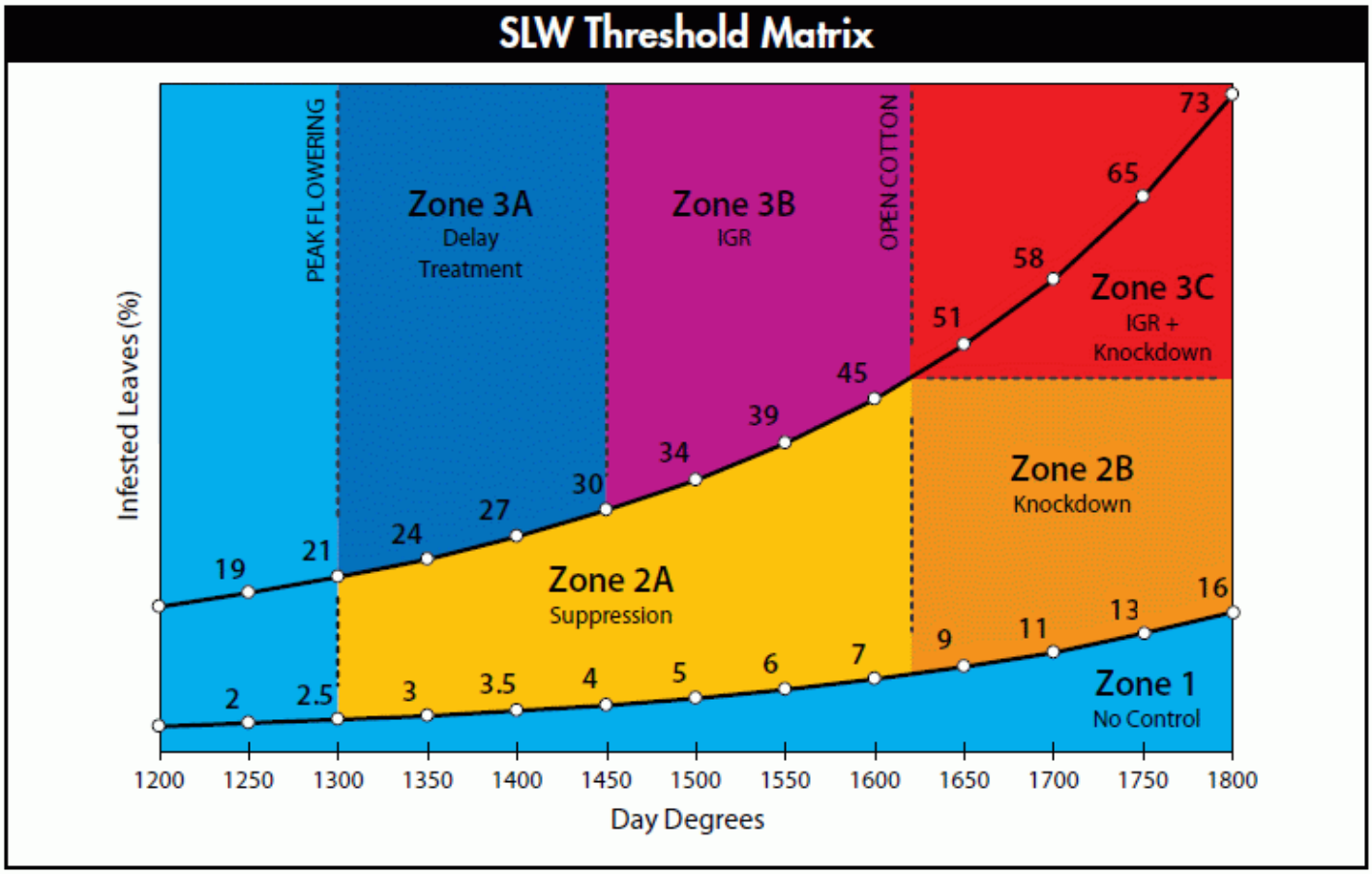
- Maybe defoliate slightly early

- **Harvest later**

- **Leave module in field longer**

- **Cool temperatures will help**

– influx will struggle to cause problem on its own



Close to defoliation (<10d)

- Low-moderate SLW (see left image)
- Slight sheen
- Bolls clean (check if lint is crackly)
- Avoid getting worse
- Defoliate as soon as you can (as early as 50% open)

Light Contamination

Middle MS Bolls

Honeydew on middle leaves

Bottom 25% MS Bolls

Bottom 25% MS Bolls

Close to defoliation (<10d) but worse whitefly + honeydew

• Sticky leaves (see above image) • Few bolls down low with ‘grey’ • Prevent getting worse
• Knockdown if necessary • Defoliate ASAP (as early as 50% open) • Harvest later

Moderate Contamination

Middle MS Bolls

Middle MS Bolls

Bottom 25% MS Bolls

Honeydew on middle leaves

2 - 3 weeks or more to defoliation

• Light sheen on leaves (see above image) • A few bolls low with light grey • Must manage to prevent getting worse
• Whitefly – mostly adults (3rd - 9 node) - (knockdown + defoliate early)
• Whitefly – adults and nymphs (3rd - 9 node) • Consider Admiral if longer period (> 2-3 weeks) and maybe knockdown
• Consider cutting losses, defoliating early (as early as 50% open) and harvest late

Light Contamination

Middle MS Bolls

Honeydew on middle leaves

Bottom 25% MS Bolls

Bottom 25% MS Bolls

2-3 weeks or more to defoliation – bad SLW and Honeydew

• Heavy sheen on leaves (see above image) • A few bolls low with light grey • Potential big problem – you must act now • Whitefly – adults and nymphs (3rd - 9 node) • Consider Admiral now + knockdown • Or using Knockdown + follow up (only about 5 d control) • cutting losses, defoliating early (as early as 50% open) and harvest late (or leave module in field)

Severe Contamination

Middle MS Bolls

Honeydew on middle leaves

Bottom 25% MS Bolls

Adults on top 3-6 node leaves

Bad fields

- **Defoliate as soon as possible**

- taking into consideration risks for fibre quality

- defoliation as early as 50% bolls open not too risky for quality and may significantly reduce honeydew.

- **Weathering time**

- especially rain, dew, high humidity – promote sooty moulds which breakdown honeydew

- Rain will remove some honeydew

- Harvest late / last & leave module in field longer – allows more time for weathering

The future

- **Likely to recur – base population**

- **Strategies**

- Farm hygiene

- Tighter planting window (avoid late crops)

- Conserve beneficials – avoid SP's, OP's, Regent against mirids

- Budget to manage whitefly

- Early defoliation

- Harvest late + leave module in field longer

- Okra leaf varieties (1/2 as many SLW)

More information

- **CRC website**

http://www.cottoncrc.org.au/content/Industry/Publications/Pests_and_Beneficials/Whitefly.aspx

- **IPM blogsite**

http://www.thebeatsheet-ipmnews.blogspot.com/