

Field Guide for Two-spot Cotton Leafhopper

Amrasca biguttula (Ishida) (Typhlocybinae: Hemiptera)

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IV. Look for Host Plants:

Malvaceae: Cotton, Okra, Roselle, Hibiscus

Solanaceae: Eggplant, Tomato, Potato

Asteraceae: Sunflower, Marigold

Vitaceae: Grapevine

Fabaceae: Cowpea, Green gram, Pigeon pea

Cucurbitaceae: Cucumber, Pumpkin

Pedaliaceae: Sesame

V. Look for Scouting Options:

Visual Inspection: Underside of young leaves; note hopperburn (yellowing, curling, bronzing).

Sweep Net: Sweeps plants; count adult/immature.

Beat Sampling: Tap plants over white tray; count nymphs/adults.

Sticky Traps: Yellow cards at canopy height; monitor adult migration.

Thresholds: 2 nymphs/leaf (cotton, okra); 2–3 adults/sweep; hopperburn on ~10–15% plants.

VI. Look for Control Options:

A. Cultural/Mechanical Control:

- 1. Start Clean**
Inspect all incoming stocks
Isolate Infested
- 2. Weed & Sanitize**
Remove alternate hosts
Destroy infested debris
- 3. Space & Airflow**
Maintain plant spacing to
enhance airflow, reduce pest
buildup, improve spray coverage
- 4. Barrier Netting**
Use insect-proof netting or
screen houses in high-value
blocks
- 5. Scout Weekly**
Flip leaves and inspect
undersides for nymphs; check
yellow sticky traps for adults
- 6. Prune & Remove**
Clip off heavily infested plant
parts & destroy them to
prevent reinfestation
- 7. Plant Health**
Balance fertilization & irrigation
to maintain healthy plant
growth
- 8. Trap Crops**
Use cotton, okra, or roselle as
pull crops to attract this species
away, as they are preferred

B. Chemical Control:

1A (Carbamates) Carbaryl (Sevin SL) Nursery	4A (Neonicotinoids) Acetamiprid (TriStar 8.5SL); Dinotefuran (Safari 20SG); Imidacloprid (Marathon); Thiamethoxam (Flagship 25WG) Nursery, Greenhouse	23 (Tetramic acid derivative) Spirotetramat (Kontos) Nursery, Greenhouse
1B (Organophosphates) Acephate (Orthene T&O) Nursery, Greenhouse	4D (Butenolide) Flupyradifurone (Altus) Nursery, Greenhouse	28 + 4A (Diamide + Neonic) cyantraniliprole + Thiamethoxam (Mainspring Xtra) Nursery, Greenhouse
3A (Pyrethroids) Bifenthrin (OnyxPro, Talstar); Cyfluthrin (Lambda-cyhalothrin (Scimitar GC); Fenpropathrin (Tame 2.4EC; Tau-fluvalinate (Mavrik Aquaflow; Permethrin (Perm-Up 3.2EC); Pyrethrins (Pyganic, Pyrethrum TR) Nursery, Greenhouse	16 (IGR) Buprofezin (Talus 70DF) Nursery, Greenhouse	29 (Feeding blocker) Flonicamid (Aria) Nursery, Greenhouse
3A + UC Pyrethrins + Canola oil (Pycana) Nursery, Greenhouse	21A (METI insecticides) Azadirachtin (AzaGuard); Neem oil (Triact 70); <i>Beauveria bassiana</i> (BotaniGard); Horticultural oils (SuffOil-X, Sunspray); Fenpyroximate (Akari 55C); Pyridaben (Sanmite SC); Tolfenpyrad (Hachi-Hachi SC) Nursery, Greenhouse	Botanicals / Biopesticides Capsicum + garlic + canola oil (Capliiva Prime) Nursery, Greenhouse

The insecticides listed are those currently registered for use against leafhoppers in general. Their inclusion here does not indicate that each product has been specifically tested or proven effective against TSCL. Mention of trade names or products is for informational purposes only and does not constitute endorsement. Always follow the product label and local regulations when making management decisions. For resistance management, rotate across different IRAC numbers (switch colors), not sub-letters.

Disclaimer: This field guide provides tentative support for field identification and management.
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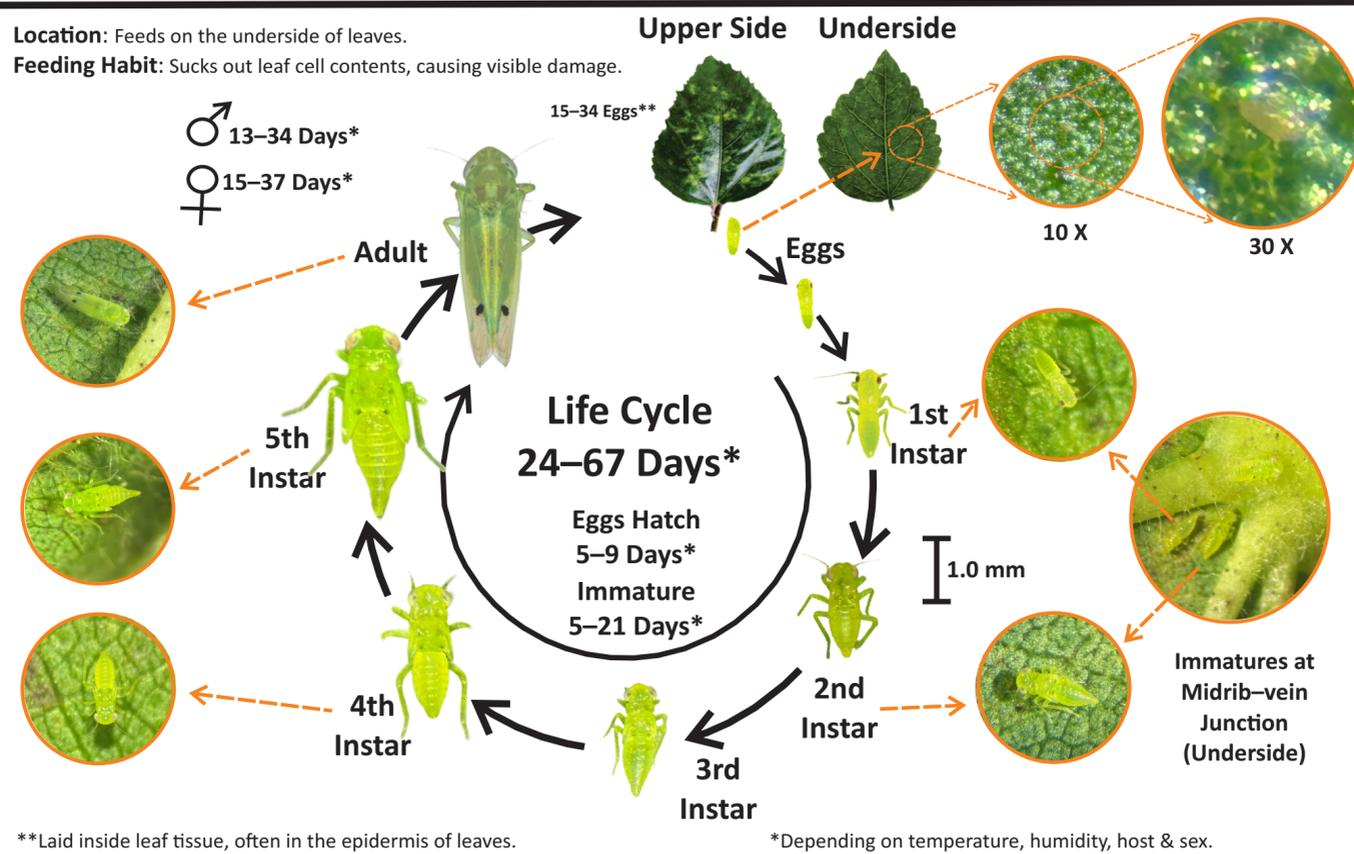
I. Understanding Size:



II. Understanding Life Cycle:

Location: Feeds on the underside of leaves.

Feeding Habit: Sucks out leaf cell contents, causing visible damage.



**Laid inside leaf tissue, often in the epidermis of leaves.

*Depending on temperature, humidity, host & sex.

III. Look for Two Spots and Signs of Damage:

A. Two Spots:

- Tiny green body
- Two dark spots on wings

B. Symptoms: (also known as hopperburn)

- Leaves turn yellow, then red, then brown
- Leaves may wilt & curl

