Who should I notify if I suspect a LEM infestation? Please notify FDACS-Division of Plant Industry at 1-888-397-1517 and Jeff Wasielewski, Commercial Tropical Fruit Crops Agent, UF-IFAS-Miami-Dade County Extension at 305-248-3311 x.227.

I have LEM on just a few trees, what steps should I take to manage this pest? If the infestation is localized and restricted to a few trees within the grove we recommend selective pruning of only infested plant parts. Burn or bury infested material. Treat with acaricides (miticides), every 10-14 days as new growth appears. See the factsheet on Management Recommendations for the Lychee Erinose Mite (LEM) for more information on using acaricides.

I have LEM throughout my grove, what steps should I take to manage this pest? If the infestation is homogeneously distributed throughout the grove we recommend hedging and topping the trees to remove 2-3 feet of the youngest growth. Sanitation pruning can be conducted during the post-harvest period (i.e., usually after June) before the trees become “dormant” during fall and winter. Prune to remove all the infested plant parts including foliage, young stems and/or branches and do not move infested material off the property. Burn or bury infested material. Treat with acaricides (miticides), every 10-14 days as new growth appears. See the factsheet on Management Recommendations for the Lychee Erinose Mite (LEM) for more information on using acaricides.
Will spraying LEM with an acaricide kill the pest? LEM is typically protected inside the erinea that it creates and cannot be killed by acaricides. The acaricides labeled for lychees are prophylactic and are sprayed after removing infested plant parts on new flush to prevent LEM infestations.

A grower or homeowner close to me has LEM, what can I do to prepare for or help prevent this pest? Scout your trees frequently for signs of LEM infestation. When your tree begins new growth or panicle emergence (flowering) begin applications of an acaricide at 15-day interval until the new growth has matured. See the factsheet on Management Recommendations for the Lychee Erinose Mite (LEM) for more information on using acaricides.

What will LEM do to my lychee crop? LEM infestations may result in an 80% reduction in fruit production.

What parts of the tree does LEM typically attack? New growth both vegetative growth (e.g., shoots and leaves) and reproductive flushes (e.g., panicles, flowers and fruit).

How does LEM move from one tree to the next? LEM are microscopic and can move through wind dispersal, on bees, on humans, and on tools. It is important to clean your tools after pruning off infested branches and to change and wash your clothes so you do not spread LEM within your grove or to adjacent (neighborhood) lychee trees.

How do I clean my tools after pruning off infested branches? All tools (e.g., clippers, loppers, hand saws, and chain saws) and equipment (e.g., hedgers, toppers) used for pruning infested trees should be washed with a 10% bleach solution (nine-parts water to one-part bleach) before being used on other trees. After pruning and/or handling infested plant material, all clothing and gloves worn during the pruning and disposal operation should be changed and washed because of the potential to move the mite to non-infested sections of the canopy and/or to additional non-infested trees.

I know LEM are small, can I see them with a hand lens? No, LEM are microscopic. What you will see are the signs of LEM: small blisters with silver-white colored hairs, also known as “erinea”. As LEM populations grow, a reddish-brown hairy mass develops on the underside of the leaf, which may cause leaves to become distorted or curled.

How important is scouting for LEM? Scouting is extremely important and is your best weapon for finding and managing LEM. Frequent and regular monitoring of trees should be conducted to detect LEM infestations.

What are the signs that I have LEM? LEM infests immature leaves and forms small blisters (Fig. 1) with silver-white colored hairs, also known as “erinea”. As LEM populations grow, a reddish-brown hairy mass (Fig. 2) develops on the underside of the leaf, which may cause leaves to become distorted or curled. Erinea may also develop on other plant parts as the LEM population grows.
I know that pruning off branches with LEM is important. What do I do with the affected branches once I remove them? Branches should be burned or buried. If you are a homeowner, branches can be double bagged, securely tied, and then either brought to the landfill or placed in the county waste management garbage pick-up system.

Figure 1. LEM infests immature Lychee leaves and forms small blisters.
Figure 2. The erineum is a reddish-brown hairy mass that, in some instances, can cover the entire underside of the leaf, which may become distorted or curled.