

Hibiscus Erineum mite is highly host specific and has only been recorded on ornamental hibiscus.

Damage of Erineum mites on okra, another member of the Malvaceae plant family has been reported in other countries. Affected okra has not been seen in Jamaica.

Transmission

The pest is spread on cuttings.

Management

Plants can be infested with the pest with no visible symptoms. Once damage is evident, it is too late because the mites are already established within the plant tissue.

Natural enemies

Predatory mites (phytoseiids) feed on the eriophyids. Unfortunately, in this case the predators are apparently not efficient enough to prevent galling.

Therefore, management strategies should include combination of mechanical and chemical control measures:

- Affected plants should be pruned to improve their appearance.
- Ensure, that pest infested parts of plant are properly disposed (by burning where possible, or by placing pruned twigs into the garbage bag and 'baking' on the sun for several days prior to disposal).

- Spraying is carried out to protect expanding leaves and new buds. Sprays at monthly intervals throughout the year are reported to provide protection. More frequent sprays may be needed during the main growth period. Existing galls will persist on the plant until the affected tissue dies, making it difficult to judge the success of any spray program.

- The number of effective pest control materials for controlling Erineum mite is limited. Pesticide products with translaminar properties are best. Foliar application of insecticides Newmectin® 1.8 EC and/or Cure® 1.8 EC (*a.i. abamectin*) and Confidor® 70WG (*a.i. imidacloprid*) showed good results in controlling this pest.

- Plant nurseries and garden stores should carry out regular inspection of plants to ensure sale of pest free hibiscus.

- Be vigilant when buying hibiscus plants from nurseries and garden stores or collecting hibiscus cuttings even from apparently uninfected plants.

Information on pesticides is available on Pesticide Control Authority website: www.caribpesticides.net

Remember, all pesticides are toxic. Carefully read Label prior to use.

For further information contact:



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Cover picture:
Healthy Hibiscus plant



Hibiscus Erineum MITE

Aceria hibisci
(= *Syn. Eriophyes hibisci*)



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Hibiscus Erineum Mite

Hibiscus Erineum Mite - *Aceria hibisci* (Napela, 1906), was confirmed in Jamaica in 2005. Since then, the mite has become established and severe infestation of hibiscus observed in all parishes.

Table 1: Hibiscus Erineum Mite Taxonomy

Common Name	Hibiscus Erineum Mite
Other common names	Eriophyid Gall Mite Hibiscus Erinose Mite, Hibiscus Leaf-crumbling Mite
Phylum:	ARTHROPODA
Class:	ARACHNIDA
Order:	Acarina
Family:	Eriophyidae

Erineum mite damages the young leaves and the developing vegetative buds of hibiscus shrubs (*Hibiscus rosa-sinensis*). A common characteristic is the production of pockets of galled tissue.

It feeds deep within the plant tissues sucking out plant juices with stylet-like mouthparts and transfers a substance, which causes deformation of plant growth. Feeding generally produces a variety of symptoms:

- Light yellow “bumpy” galls on leaves, flowers and stems (Figures 1 – 5)
- Distorted leaves (Figure 6)
- Densely packed leaves (Figure 6)



Hibiscus damaged with Erineum mite



Hibiscus damaged with Erineum mite



Fig. 3: Distorted growth (top) and galls on leaves (below)



Fig. 4: Distorted growth of flowers



Fig. 5: Galls appearance on the lower (left) and upper (right) surface of leaf



Fig. 6: Densely packed growth of foliage



Fig. 7: Head, legs, and gnathosomal region of the eriophyid mite *Aceria hibisci* that causes hibiscus leaf galls. Magnification*: x 435

Erineum mites are extremely tiny (160-185 micrometers in length), microscopic worm-like or spindle-shaped, with elongated bodies (Figure 7). They cannot be detected with the unaided eye.