

Biosecurity Containment, Advice and Control Measures

- Avoid the movement of taro corms, planting and other dalo beetle host plants from dalo beetle infested areas to non infested areas.
- Contact your nearest Biosecurity Office or the MPI for necessary supervision of treatments to be carried out for infested taro planting materials.

Do Not Move the items mentioned below from Taro Beetle Infested Areas to Non-Infested Areas



Dalo, dalo tops & suckers



Pot plants, yaqona, yams, kumala with soil



Used dalo sacks



Dalo ni tana via banana, yams, yaqona & kumala plantings



Poultry manure & compost



Used farm equipment



All machineries and vehicles coming from taro beetle infested areas need to be thoroughly cleaned before moving to non-infested areas

For more information please contact:

Biosecurity Authority of Fiji Office –

Headquarters (Suva)

Ph: 331 2512

Fax: 330 5043

Nadi Airport

Ph: 672 0803/ 672 5092

Fax: 672 0053

Lautoka

Ph: 666 1182

Fax: 665 0084

Savusavu

Gulabdas Building
Main Street- Savusavu
Phone: (679) 9957240

Levuka

Ports Fiji Building
Phone: (679) 344 0168

Rotuma

Ahau Government Station
Phone: (679) 889 1042

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Help us to protect Fiji.



Taro Beetle (*Papuana uniondis*)



STOP the spread of
TARO BEETLE

Protect our Taro Industry

Taro is one of the most important staple food crops in Fiji not only because of its traditional significance but also because of its economic importance. Fiji's taro industry earns millions of dollars in export revenue. Fiji is currently the major exporter of taro in the Pacific with exports valued at almost \$25million dollars annually.

However, Fiji's taro is also threatened by the taro beetle *Papuana uniondis*. Adult taro beetle damage the underground corms by chewing and burrowing into them creating tunnels. These beetles create large cavities allowing secondary rots to develop causing low quality corms for consumption. Taro damaged by beetles cannot be exported.



Distribution

Taro beetle was first found in Fiji in 1984 and since then it is being localized in the Central Division of Viti Levu extending from Tailevu to Sigatoka and up to Vunidawa in the interior. Lovoni, in Ovalau, the Ra Province from Nalidi to Navitilevu along the Kings Highway are also taro beetle infested areas. Gau Island is the latest area in Fiji that has been infested by taro beetle.

Areas affected by Taro Beetle



Life Cycle

The adult beetle is black, shiny and 15-20mm in lengths. Many *P. uniodis* species has a horn on the head with an average life cycle of 22 to 25 weeks.



The adult beetles fly from the breeding sites to the taro field and tunnel through the soil and into the base of the taro corm. They then proceed to feed on the growing corm, leaving large holes that degrade the market quality and value of the corm. The wounds created while feeding promotes a path way for rot-causing organisms. The feeding activity can cause wilting and even death of the affected taro plants.

Control Measures

Numerous efforts have been made to develop effective control measures for the taro beetle. These include:

Cultural control:

- Crop rotation, clean planting material (free from soil, grubs and beetles).
- Destroy breeding sites at the sides of taro gardens.

Biological control

- The fungus, *Metarhizium*, works under experimental conditions, but as yet there is no recommendation for farmers. A virus has been tried without success.

Chemical control

The chemical imidachloprid (Confidor) and cypermethrin (Mustang) have controlled *Papuana* beetles in Fiji. However, please do seek advice from the Extension and Research Division of the Ministry of Primary Industries (MPI) or Biosecurity Authority of Fiji for more information on this.

Life Cycle

