

MANAGEMENT OF EPIPHYTE PLANTS

Epiphyte Plants

Epiphytes are plants that either grow upright, climbing or creeping against the trunk of cultivated plants. It could be a parasitic plant that is capable of harming the tree or is only a plant just growing only on the stem.

The Objectives of the Management of Epiphyte Plants:

- (a) Avoid obstruction of view towards the ripe bunches on the tree during harvesting.
- (b) Avoid parasitic plants from growing on tree trunk, which could be detrimental to the crop.

Method of Epiphyte Management:

- (a) Types of epiphytes growing on oil palm trunks that need to be controlled: fig-trees, creepers/ vines.
- (b) An area distance of one foot or 30 centimetres (cm) below the lowest palm frond of the tree should be free from any epiphyte to enable the harvester to spot any ripe oil palm bunch.
- (c) Method of controlling epiphytes: brushing with herbicide or use herbicide absorption technique.

(A) Epiphyte Control Using Herbicide Brushing Technique

List of safety equipment for the poisoning of epiphyte, such as fig tree:

- 1- Apron
- 2- Rubber Glove (Nitrile)
- 3- Safety Eye Piece
- 4- Safety Helmet
- 5- Safety Shoe
- 6- Respirator Mask
- 7- Long-sleeves shirt & trousers

Chemical substances needed in poisoning operations of the epiphyte such as fig tree:

- 1- triclopyr (Garlon®, and any other brands)
- 2- Diesel

Equipment needed in poisoning operations of the epiphyte such as fig tree:

- 1- Paint Brush
- 2- Measuring Cylinder
- 3- Long Extension Wooden Stick (to tie to the Paint Brush)
- 4- Container to mix the chemical substances
- 5- Chemical Solution Stirrer

Application method in brush poisoning operation of the epiphyte such as fig tree

Example of the herbicide mixture using 1 liter of Garlon® herbicide

The ratio of Garlon® to Diesel = 1: 18

- 1- Quantity of required or recommended diesel is 18 liters.
- 2- Using the rate recommended above, mix Garlon® with diesel. Mix the two solutions after that.
- 3- Then, soak the head of the paint brush into the cocktail and brush the herbicide mixture around the stem of the epiphyte.

(B) Control of Epiphyte through Herbicide Absorption Technique

List of safety equipment used in poisoning of epiphytes, such as fig trees through herbicide absorption:

- 1- Apron
- 2- Rubber Glove (Nitrile)
- 3- Safety Eye Piece.
- 4- Safety Helmet
- 5- Safety Shoe
- 6- Respirator Mask
- 7- Long-sleeves shirt & trousers

Chemical substances needed in herbicide poisoning operation of the epiphytes such as fig tree through herbicide absorption:

- 1- Glyphosate (Roundup®, Ken Up™, and any others)

Equipment needed in poisoning operations of the climbing tree such as fig tree by way of poison absorption:

- 1- Ice cream/ small plastic bag
- 2- Plastic string

- 3- Scissors/ knife
- 4- Measuring cylinder

Herbicide absorption technique in poisoning operation of epiphytes tree such as fig tree

- i) Identify the root of large fig trees.
- ii) Cut the bottom part of the root.
- iii) Put 20ml of 41% IPA Glyphosate (eg Roundup®) into a plastic bag.
- iv) Soak the cut root in a plastic bag that has been filled with herbicide.
- v) Tie the open end of the plastic bag together with the soaked root using a plastic string.



Diagram 1. A fig tree that grown on the oil palm stem



Diagram 2. Example of the climbing epiphyte growing on the oil palm stem that can hide the view of ripe bunch from the harvester