

## FUNGICIDE APPLICATION FOR THE CONTROL OF *Ganoderma* UPPER STEM ROT (USR) DISEASE IN OIL PALM

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Upper stem rot (USR)-infected palms: Formation of fruiting body and stem rotting appearing at 1-metre from ground.

### HIGHLIGHTS

Hexaconazole  
(Fungicide)

Registered

Systemic

Leave no residue

### IMPACT

- Effective and efficient curative treatment
- Extend productive life span
- Reduce risk of *Ganoderma* spread to adjacent oil palms
- Increase yield

**CONTROL OF GANODERMA  
FOR BETTER YIELDS**

### APPLICATION PROCEDURE



**1** Selection of USR infected-palm with disease severity index (DSI) 1 and 2 with fruit bunches



**2** Removal of the old frond and fruiting bodies at the USR-infected trunk/stem using chisel/chainsaw



**3** Drilling of one hole into the trunk at 1 m height from ground level using motorised engine drill attached with a drill bit (45 cm long, 11 mm diameter)



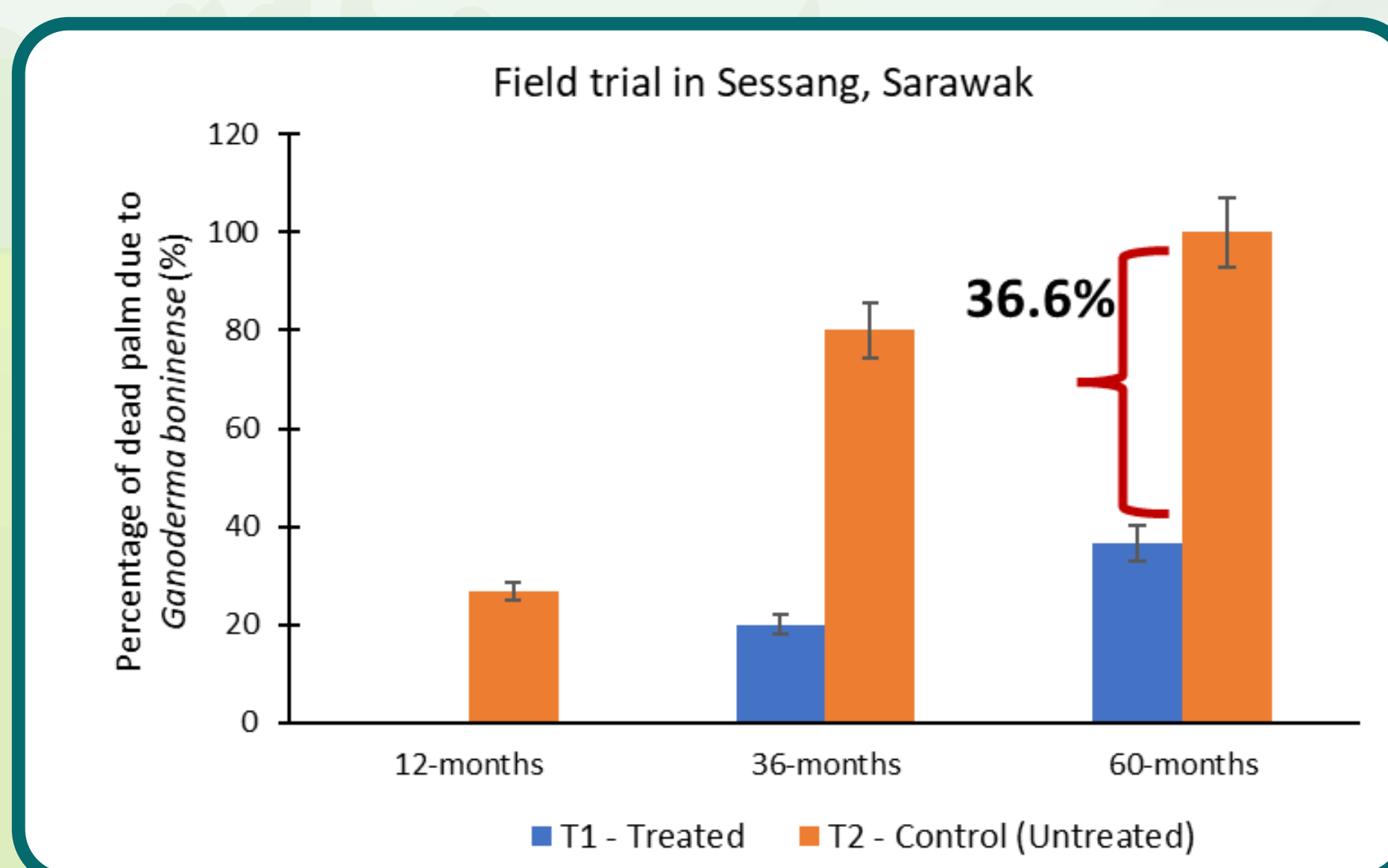
**4** Injecting fungicide solution (90 ml + 3 litres) using pressure injector apparatus (PIA) into drilling hole (2 litres/hole)



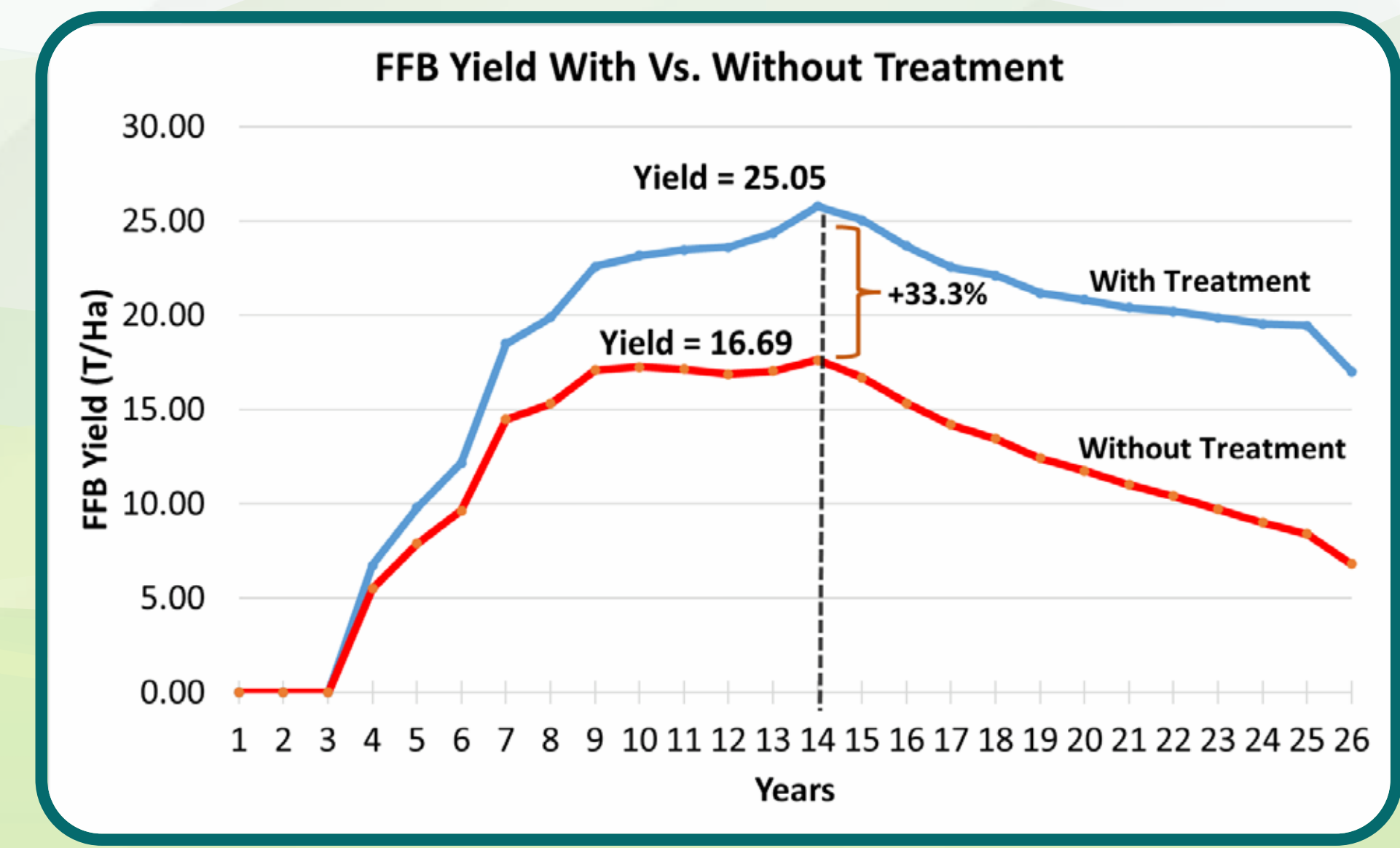
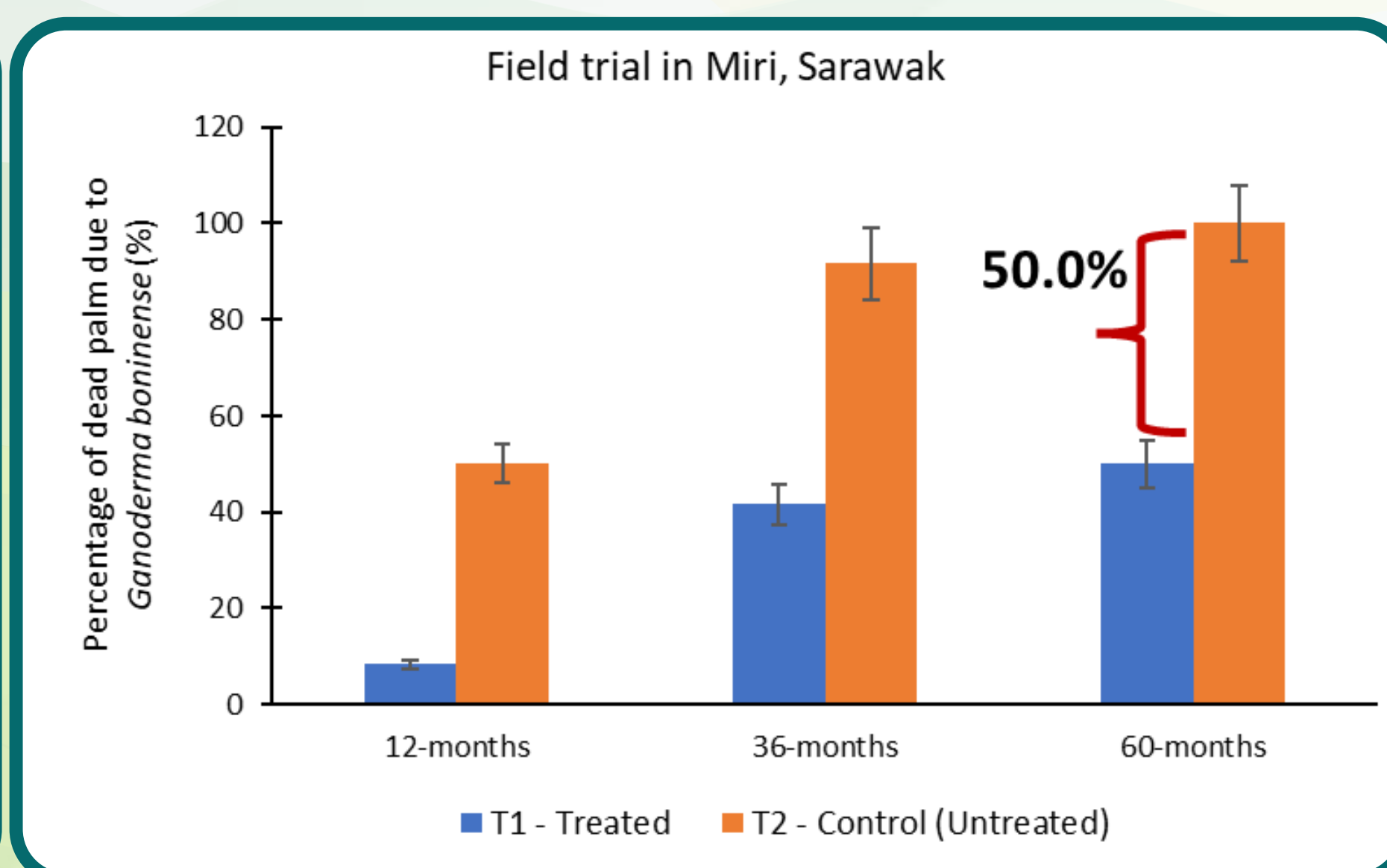
**5** Spraying the remaining 1 litre solution onto the USR-infected trunk tissues

### PRODUCTIVITY POTENTIALS

- Estimated cost of hexaconazole application is RM50 to RM70 per palm.
- The average fresh fruit bunch (FFB) yield of palms treated with treatment is relatively more than untreated, projected increase in productivity → 33% at 14 years after planting.



The percentage of dead palms was found to be the significantly lowest in USR-infected palms treated with hexaconazole in both study sites, Sessang and Miri at 36.6% and 50.0% of dead palms, 60 months after treatment.



Average yield of fresh fruit bunch (FFB) of upper stem rot (USR)-infected palms with and without hexaconazole (fungicide) treatment.

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