



# **TEKNOLOGI INOVATIF PERTANIAN**



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# Formula Aktif *Metarhizium anisopliae* var. *Anisopliae* *Metarhizium Bioinsecticide*

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Bahan aktif bioinsektisida ini *Metarhizium anisopliae* var. *anisopliae* yang diisolasi dari serangga *Brontispa longissima*.

Keunggulan bioinsektisida ini adalah senyawa enzim protease dan destruxin yang dihasilkan *M. anisopliae* menembus kutikula dan meracuni serangga. *M. anisopliae* berkembang biak di dalam tubuh serangga dan konidia yang dihasilkan akan menginfeksi serangga yang masih sehat.

Penerapan teknologi bioinsektisida ini mendukung kestabilan produksi kelapa dan meningkatkan keaneka ragaman hayati. Bioinsektisida ini prospektif dikembangkan secara komersial.



The main component of this bioinsecticide is a fungus *Metarhizium anisopliae* var. *anisopliae* isolated from insects *Brontispa longissima* (Gestro). The coconut leaf beetle (*B. longissima*) is one of the most damaging pests of coconut and other palms. The larvae and adults of the beetle feed on the soft tissues of the youngest leaf in the throat of the palm. Affected leaves dry up, resulting in stunting of the palm and reduced nut production.

Protease and destruxin enzymes are produced by the fungus, penetrate cuticle the of leaf beetle and these chemical compounds become toxic to the insect. The fungus multiplies in the body of the insect and the conidia produced infect healthy insects.

The application of this technology can support the stability of coconut oil production and at the same time increase natural biodiversity.

