

OESOPBRENGS BY KORING MET BIO-IMPILO VERHOOG

YIELD INCREASE IN WHEAT WITH BIO-IMPILO

Navorsing het bewys dat *Trichoderma* spp metaboliete afskei (Bio-Impilo), wat in staat is om plantweerstand te verhoog, wortelgroei te stimuleer, asook opbrengs by sekere gewasse met tussen 8 en 25 % te verhoog.

Weerstandsreaksies by plante word verkry deurdat die metaboliete verhoogde salisielsuur vlakke by plante teweegbring, wat weer weerstandsmeganismes in die plant stimuleer. Hierdie metaboliete het ook antibiotiese werking en skei oa ook die plantgroei hormone ouksien en sitokienien af.

Die swamspesie *Trichoderma harzianum* leef in assosiasie met plantwortels waar dit die plant help om voedingstowwe op te neem en skei ook bogenoemde metaboliete in die plantwortel af.

Laboratorium proewe het getoon dat Bio-Impilo die ontkieming van sade versnel en wortelontwikkeling stimuleer. (Fig.1)

Proewe is die afgelope seisoen op wingerd, koring en ander gewasse gedoen om die effek op weerstand en opbrengs te bepaal. Op wingerd is goeie beheer teen donsskimmel verkry, terwyl 'n beduidende verhoging in opbrengs by koring verkry is.

Met slegs 1L Bio-Impilo per hektaar wat op 6 blaar stadium op koring toegedien is, op proewe te Piketberg en Malmesbury, is opbrengsverhoging van 5% en 5.8% onderskeidelik, per ha verkry.

By koring sal die ideaal wees om Bio-Impilo op 6 blaar stadium en weer kort voor of tydens vlagblaarstadium @ 1L/ha toe te dien vir verbeterde opbrengs en weerstand teen roes. Bio-Impilo kan saam met meeste ander produkte gespuit word. Kontak Dr. Strauss Ferreira indien twyfel bestaan.

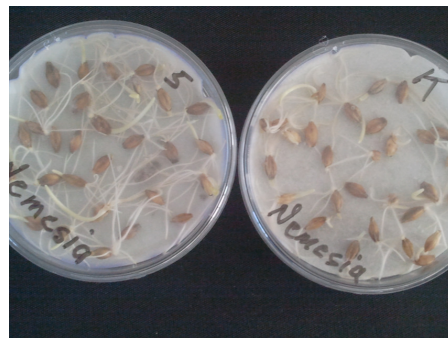
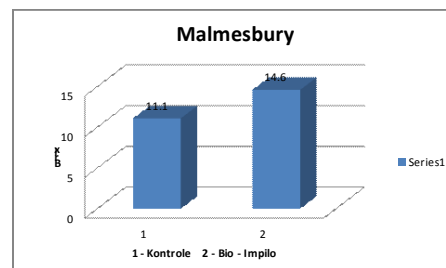
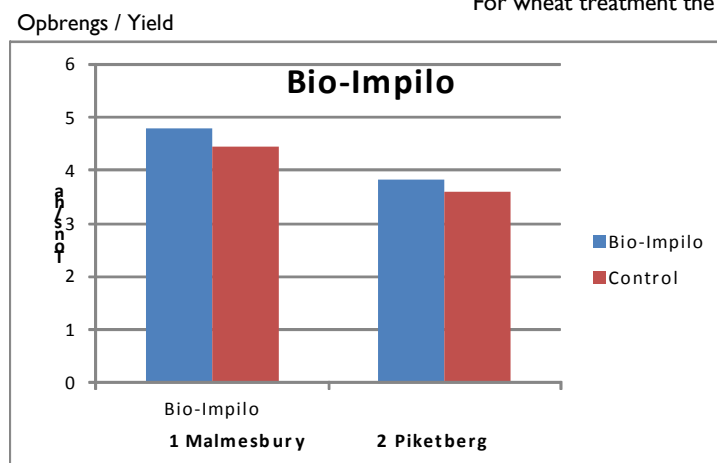


Fig. 1



Brix



Research has shown that *Trichoderma* spp secrete metabolites (Bio-Impilo), which are able to increase plant resistance, root growth and yield increase (by between 8 and 25%) in some crops.

Resistance reactions in plants are achieved by the metabolites bringing about increased levels of salicylic acid, which in turn stimulate defence mechanisms. These metabolites have antibiotic activity and among others, the plant growth hormones auxin and cytokinins.

The fungus *Trichoderma harzianum* lives in close association with plant roots where they help the plant to take up nutrients and the metabolites are excreted in the roots.

Laboratory trials have shown that Bio-Impilo accelerates the germination of seeds and stimulates root development. (Fig. 1)

Trials over the past season on grapes, wheat and other crops were done to determine the effect on resistance and yield. Data is currently processed and two facts established are that vineyards treated showed good control against downy mildew and wheat treated showed a significant increase in yield.

With only 1L Bio-Impilo per hectare applied at 6 leaf stage to wheat (Piketberg and Malmesbury) yield increases of 5% and 5.8%, respectively, per ha were recorded.

For wheat treatment the ideal would be:

First application at 6 leaf stage. Second application shortly before or at the flag leaf stage. Each @ 1L/ha. Bio-Impilo can be added to most spray mixes. Please ask Dr. Strauss