

INTISARI
PENGENDALIAN PENYAKIT REBAH SEMAI PADA JAGUNG
SECARA KIMIAWI DENGAN FUNGISIDA

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Penyakit rebah semai merupakan penyakit yang menyebabkan banyak kerugian pada masa awal perkecambahan tanaman. Pengendalian penyakit rebah semai dapat dilakukan dengan berbagai cara, salah satunya ialah dengan pengendalian kimia. Penelitian ini bertujuan untuk mengkonfirmasi dan mengetahui keefektifan fungisida campuran fludioxonil dan mefenoxam dalam mengendalikan penyakit rebah semai pada benih jagung pada uji *in vitro* dan *in vivo*. Penelitian dilakukan dengan menggunakan tiga patogen yaitu *Fusarium graminearum* (W3), *Rhizoctonia solani* (NBR) dan *Pythium* sp. (BTL1) dengan lima perlakuan yang meliputi, perlakuan A (kontrol negatif), perlakuan B (kontrol positif), perlakuan C (fludioxonil 2,5 g a.i./100kg dan mefenoxam 1 g a.i./100kg), perlakuan D (thiram) dan perlakuan E (captan). Parameter penelitian yang diamati berupa pertumbuhan diameter koloni patogen, kejadian penyakit dan pengamatan agronomis. Hasil penelitian menunjukkan bahwa secara *in vitro* fungisida campuran fludioxonil dan mefenoxam efektif menekan perkembangan penyakit rebah semai yang disebabkan oleh *F. graminearum* sebesar 100%. Namun pada uji *in vivo* fungisida thiram lebih efektif menekan penyakit rebah semai yang disebabkan oleh *F. graminearum*. Pada *R. solani*, secara *in vitro* fungisida campuran fludioxonil dan mefenoxam efektif menekan perkembangan penyakit rebah semai sebesar 100%, tetapi tidak efektif pada uji *in vivo*. Adapun pada *Pythium* sp. secara *in vitro* fungisida campuran fludioxonil dan mefenoxam mampu menekan perkembangan penyakit rebah semai sebesar 100%. Tetapi pada uji *in vivo* fungisida campuran fludioxonil dan mefenoxam tidak efektif menekan penyakit rebah semai yang disebabkan oleh *Pythium* sp.

Kata kunci: Rebah Semai, Fludioxonil dan Mefenoxam, *Fusarium graminearum*, *Rhizoctonia solani*, *Pythium* sp.

ABSTRACT
CHEMICAL CONTROL OF DAMPING-OFF DISEASE IN MAIZE
WITH FUNGICIDES

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*Damping-off diseases is a disease that causes a high of losses in the early stage of plant germination. Control of damping-off diseases can be done in various ways, one of which is chemical control. This study aims to confirm and determine the effectiveness of mixed fungicide fludioxonil and mefenoxam to controlling damping-off diseases in maize in vitro and in vivo. The study was conducted using three pathogens, *Fusarium graminearum* (W3), *Rhizoctonia solani* (NBR), and *Pythium* sp (BTL1) with five treatments, treatment A (negative control), treatment B (positive control), treatment C (fludioxonil 2.5 g ai / 100 kg, and mefenoxam 1 g ai / 100 kg), treatment D (thiram), treatment E (captan). The observed parameters were growth of pathogen colonies, disease incidence and agronomic observation. The results showed that in vitro test, a mixture fungicide of fludioxonil and mefenoxam was effectively to suppress the development of damping-off disease caused by *F. graminearum* by 100%. However in vivo, thiram was more effective in suppressing damping-off disease caused by *F. graminearum*. Against *R. solani*, in vitro test showed that the mixture of fungicide fludioxonil and mefenoxam was effectively to suppress the development of damping-off disease by 100% but in vivo test showed that mixture fungicide of fludioxonil and mefenoxam was not effective to suppress damping-off diseases. As for *Pythium* sp. in vitro test showed that mixture fungicide of fludioxonil and mefenoxam was effectively to suppress the development of damping-off disease by 100%. However, in the in vivo test showed that mixture fungicide of fludioxonil and mefenoxam was not effective to suppress development of damping-off disease.*

*Key words: Damping-off diseases, Fludioxonil and Mefenoxam, *Fusarium graminearum*, *Rhizoctonia solani*, *Pythium* sp.*