

**INFLUENCE OF SEED TREATMENT APPLICATIONS WITH VARIOUS
FUNGICIDE ACTIVE INGREDIENTS AGAINST ATTACK
Peronosclerospora maydis AND PRODUCTION OF CORN**

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ABSTRACT

Peronosclerospora maydis is the main disease of corn that can be transmitted through seeds. So it is necessary to control by using seed treatment. This research was conducted from April to August 2022 in the research area of PT. BASF Jubung Lor Village, Sukorambi District, Jember Regency, East Java Province. The purpose of this research was to determine the effect of the application of seed treatment with various fungicidal active ingredients on the attack of *Peronosclerospora maydis* and the production of corn. This study used a randomized block design with 10 concentration levels (0 ml, Dimetomorph 0.3 ml/100 g seeds, Dimetomorph 0.5 ml/100 g seeds, Dimetomorph + Pyraclostrobin 0.3 ml/100 g seeds, Dimetomorph + Pyraclostrobin 0.5 ml/100 g seeds, Metalaxyl 1 ml/100 g seeds, Mefenoxam 0.5 ml/100 g seeds, Dimethomorph 0.3 ml/100 g seeds + Mefenoxam 0.1 ml/100 g seeds, Dimethomorph 0,3 ml/100 g seeds + Mefenoxam 0.3 ml/100 g seeds, Dimetomorph 0.3 ml/100 g seeds + Metalaxyl 0.7 ml/100 g seeds). Observation variables included seed germination, damage intensity, weight of corn ear per sample, and weight of corn shells per sample. Data analysis using ANOVA followed by DMRT Follow-up Test at 1% and 5% levels. Variable germination, seeds without treatment showed the yield of 99%. The intensity of damage, weight of corn cob per sample, and weight of corn shells per sample showed the recommended results were Dimetomorph + Pyraclostrobin 0,5 ml/100 g seed treatment which were respectively was 7%; 254,17 g; 219,17 g.

Keywords: Corn, Downy mildew, Fungicide, Peronosclerospora maydis, Seed Treatment