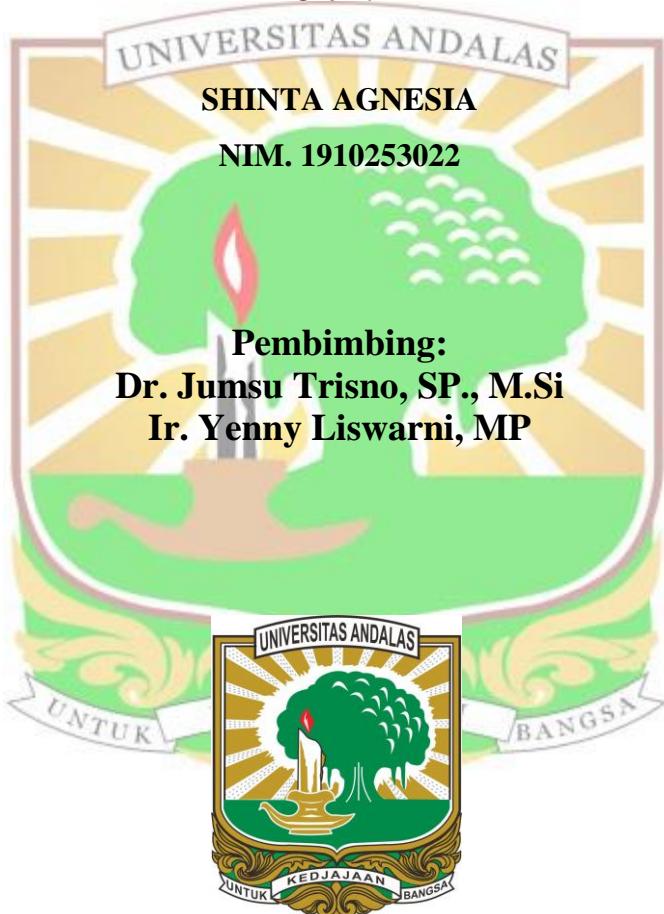


**POTENSI EKOENZIM KULIT BUAH DALAM  
MENGENDALIKAN PENYAKIT TULAR  
BENIH *Colletotrichum capsici* PADA  
TANAMAN CABAI (*Capsicum annum L.*)**

**SKRIPSI**

Oleh :



**FAKULTAS PERTANIAN  
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# POTENSI EKOENZIM KULIT BUAH DALAM MENGENDALIKAN PENYAKIT TULAR BENIH *Colletotrichum capsici* PADA TANAMAN CABAI (*Capsicum annum L.*)

## Abstrak

Patogen tular benih merupakan salah satu faktor penghambat peningkatan produksi cabai. Penggunaan ekoenzim dari kulit buah dapat menekan pertumbuhan jamur patogen tular benih pada cabai. Penelitian ini bertujuan untuk mengetahui potensi ekoenzim dalam mengendalikan penyakit tular benih *Colletotrichum capsici* pada tanaman cabai. Penelitian terdiri atas: 1. Uji blotter yang menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan dan 16 ulangan. 2. Uji daya kecambah menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan dan 8 ulangan. 3. Uji pertumbuhan bibit menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan dan 8 ulangan. Perlakuan yang digunakan yaitu kontrol, ekoenzim dari kulit buah jeruk, ekoenzim dari kulit buah pisang, dan ekoenzim dari campuran kulit buah pisang dan kulit buah jeruk. Data yang diperoleh dianalisis menggunakan sidik ragam dengan uji lanjut *Least Significance Different* (LSD) pada taraf 5%. Parameter yang diamati adalah persentase benih cabai yang terserang jamur, identifikasi jamur patogen tular benih, persentase daya kecambah normal, persentase bibit muncul lapang, persentase *pre-emergence damping off*, persentase *post-emergence damping off* dan tinggi bibit. Berdasarkan hasil penelitian menunjukkan bahwa perlakuan menggunakan ekoenzim kulit buah pisang dan campuran (jeruk+pisang) efektif mengendalikan jamur patogen tular benih *Colletotrichum capsici* dan mampu meningkatkan pertumbuhan bibit cabai.

**Kata kunci:** Cabai, ekoenzim dari kulit buah, jamur patogen tular benih.

**POTENTIAL OF FRUIT PEEL ECOENZYMES IN  
CONTROLLING *Colletotrichum capsici* CAUSES  
OF SEED BORN DISEASES ON CHILLI  
PLANTS (*Capsicum annum* L.)**

**Abstract**

Seed-borne pathogens are one of the factors inhibiting increased chili production. The use of ecoenzymes from fruit skin can suppress the growth of seed-borne pathogenic fungi in chilies. This research aims to determine the potential of ecoenzymes in controlling the seed-borne disease *Colletotrichum capsici* on chili plants. The research consisted of: 1. Blotter test using a Completely Randomized Design (CRD) with 4 treatments and 16 replications. 2. Germination test using a Completely Randomized Design (CRD) with 4 treatments and 8 replications. 3. Test seedling growth using a Completely Randomized Design (CRD) with 4 treatments and 8 replications. The treatments used were control, ecoenzyme from orange peel, ecoenzyme from banana peel, and ecoenzyme from a mixture of banana peel and orange peel. The data obtained were analyzed using variance with the *Least Significance Difference* (LSD) further test at the 5% level. The parameters observed were the percentage of chili seeds that were attacked by fungi, identification of seed-borne pathogenic fungi, percentage of normal germination, percentage of seedlings appearing field, percentage of *pre-emergence damping off*, percentage of *post-emergence damping off* and seed height. Based on the research results, it shows that treatment using banana peel ecoenzymes and a mixture (orange + banana) is effective in controlling the seed-borne pathogenic fungus *Colletotrichum capsici* and is able to increase the growth of chili seedlings.

**Key words:** Chili, ecoenzymes from fruit skin, seed-borne pathogenic fungi.