

INTISARI

Penyakit antraknosa yang disebabkan oleh *Colletotrichum siamense* merupakan salah satu kendala utama dalam budidaya bawang merah (*Allium cepa* L.), karena dapat menurunkan kualitas dan kuantitas hasil panen. Penelitian ini bertujuan untuk mengevaluasi efektivitas aplikasi *Bacillus velezensis* B-27, fungisida berbahan aktif propineb, serta kombinasi keduanya dalam mengendalikan penyakit antraknosa baik di lahan terbuka, rumah kaca, maupun periode pascapanen. Penelitian dilakukan menggunakan rancangan acak kelompok lengkap (RAKL) di lahan dan rancangan acak lengkap (RAL) di rumah kaca. Parameter yang diamati meliputi insidensi, intensitas, AUDPC, pertumbuhan agronomis, hasil umbi, serta ketahanan umbi pascapanen terhadap infeksi *Colletotrichum siamense*. Hasil penelitian menunjukkan bahwa perlakuan yang diberikan tidak berbeda nyata dalam menurunkan insidensi penyakit, namun mampu menurunkan intensitas penyakit dan nilai AUDPC. Aplikasi *Bacillus velezensis* B-27 di lahan mampu menekan intensitas penyakit meskipun tidak berpengaruh terhadap parameter agronomis dan hasil produksi. Sementara itu, seluruh perlakuan aplikasi di rumah kaca mampu menekan intensitas penyakit dan mampu meningkatkan parameter agronomis serta hasil produksi bawang merah. Pada tahap pascapanen, perlakuan aplikasi yang diberikan pada bawang merah saat di lahan di rumah kaca tidak berpengaruh terhadap ketahanan umbi yang diinokulasi *Colletotrichum siamense*.

Kata kunci: antraknosa, *Bacillus velezensis*, bawang merah, fungisida

ABSTRACT

Anthracnose disease caused by *Colletotrichum siamense* is one of the major constraints in shallot (*Allium cepa* L.) cultivation, as it significantly reduces both the quality and quantity of the harvest. This study aimed to evaluate the effectiveness of applying *Bacillus velezensis* B-27, a fungicide containing the active ingredient propineb, and their combination in managing anthracnose disease under field, greenhouse, and postharvest conditions. The research was conducted using a randomized complete block design (RCBD) in the field and a completely randomized design (CRD) in the greenhouse. Observed parameters included disease incidence, disease severity, AUDPC, agronomic growth, bulb yield, and postharvest bulb resistance to *Colletotrichum siamense* infection. The results showed that the treatments did not significantly reduce disease incidence but were effective in lowering disease severity and AUDPC values. The application of *Bacillus velezensis* B-27 in the field was able to suppress disease severity, although it had no significant effect on agronomic parameters or yield. In contrast, all treatment applications in the greenhouse significantly reduced disease severity and could improved on agronomic performance and shallot yield. During the postharvest phase, treatments applied to shallots during field and greenhouse cultivation had no significant effect on bulb resistance following inoculation with *Colletotrichum siamense*.

Keywords: anthracnose, *Bacillus velezensis*, fungicide, shallot