

EFFECT OF CULTURAL PRACTICES AND FUNGICIDES  
ON THE INCIDENCE OF PURPLE BLOTCH DISEASE OF ONION  
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ABSTRACT

Purple blotch of onion, caused by *Alternaria porri* is considered one of the most destructive diseases. It causes damage for the leaves and consequently for the obtained yield of bulbs. The present investigation aimed to study the effect of some cultural practices on the incidence of purple blotch as well as on the yield. The obtained data proved that treatment of NPK (30, 100 and 50 kg/feddan, respectively) resulted in the lowest infection percentage and disease severity, while it gave the highest bulb's yield. Agricultural sulphur at the rate of 2 kg/plot (12 m<sup>2</sup>) as a soil amendment resulted in the lowest infection percentage and disease severity of the disease. At the same time, this treatment resulted in the highest bulb yield. Regarding the effect of spraying micro-elements, the mixture treatment resulted in the lowest values of the infection and disease severity, while this treatment gave the highest yield of bulbs. Boron alginate treatment resulted in the highest infection and disease severity, while it caused the lowest yield of bulbs. Regarding the effect of fungicides, Propamocarb resulted in the lowest value of infection and disease severity and the highest yield of bulbs. The lowest values of infection and disease severity of purple blotch and higher yield were reported in plots where plants were 15 cm apart.

Key words: Onion, purple blotch, *Alternaria porri*