A study of eggplant leaves spot disease in plastic houses in Basrah Province

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Summary

The study was conducted in Plant Protection Department Laboratories – Agriculture College – Basrah University , while the field experiment was carried out in the Agriculture College fields during the period of 2017-2018.

The study included a field survey of eggplant leaves spot disease in different regions of Basrah Governorate. So the pathogenic fungi associated with spot disease were isolated , identified and controlled.

The results showed that the disease was spread in all region cultivated with eggplant in Basrah Governorate with infection percentages of 46.6-88.5%. The high infection percent was recorded at Garmat Ali region (88.5%), while the lowest percent was recorded at Agriculture College fields (46.6%).

Alternaria alternata , *Cladosporium oxysporum* and *Curvularia lunata* were isolated from the leaves infected with spot disease , it was found that they were pathogenic fungi when their pathogenicity tested. So *Cladosporium oxysporum* and *Curvularia lunata* were recorded for the first time in Iraq as causal agent of eggplant leaves spot.

The field experiment results showed that the highest infection severity was found at Safwan region which was 22.3%, followed by Garmat Ali region in a percent of 18.41%, while Qurna region gave the lowest percent (8.99%). From other hand *A. alternata* achieved a highest percent of infection (22.65), while the lowest percent (4.62%) achieved by *C. lunata*.

Finally the results explained that the fungicide Ortiva among four tested fungicides gave a best protection to eggplant which infected with leaves spot disease compared to the other fungicides, it achieved a best plant height, higher wet and dry weight of shoot and root systems, higher leaf area, higher leaves number and higher quantity of chlorophyll. Therefore it recommended for controlling the spot disease.