

# CITRUS BLACK SPOT DISEASE ON *PHUC TRACH* PUMMELO AND MANAGEMENT MEASURES IN HA TINH PROVINCE

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Pummelo is a popular fruit tree in Viet Nam. According to statistical data, pummelo cultivation area has grown to 67,200 ha, with a production of 553,000 tons in 2017. In recent years, citrus black spot disease caused by *Phyllosticta citricarpa* has been found in most citrus growing areas throughout the country, especially on *Phuc Trach* pummelo variety in Huong Khe district, Ha Tinh province. In order to establish an effective protocol to control black spot disease on *Phuc Trach* pummelo, research on the pathogen, *Phyllosticta citricarpa*, and its management measures were implemented from 2014–2016. The research results concluded that citrus black spot is a serious disease, affecting productivity and quality of *Phuc Trach* pummelo. In the climatic conditions of Ha Tinh province, the disease begins in May to early June, causing severe damage in mid-July to early September. Chemicals with the main active ingredient of difenoconazole showed obvious effects in controlling the disease. With difenoconazole treatment, percentage of fruits infected with the disease at level 1 and 2 were 1.76%–2.04% and 1.85%–2.22%, respectively; and no fruits were found infected at higher infection levels. In the control treatment with no pesticide spraying, infection rate was at 83.3%–84.3% at level 5. The most effective spraying stage for black spot disease control was at 6–7 days after completion of flowering. Based on our results, a suggested pesticide application of 3 times, with spraying interval of 15 days, could achieve the highest effect of the disease management.

**Keywords:** Black Spot disease; *Phuc Trach* pummelo, yield, quality, difenoconazole