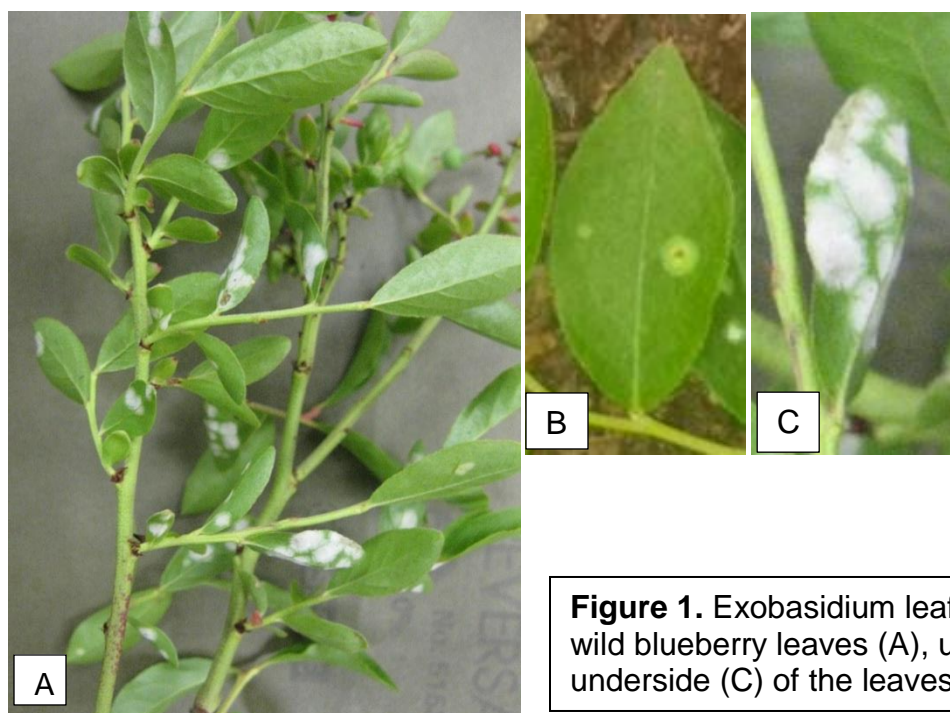




## Exobasidium Leaf and Fruit Spot of Wild Blueberry

Exobasidium leaf and fruit spot, caused by a fungal pathogen *Exobasidium maculosum*, infects wild blueberry leaves and berries. The first visible symptoms of the disease on the leaves are white to pale green round spots. They are 2 to 10 mm in diameter on the upper side of infected leaf and develop white fungal growth on the lower leaf surface (Fig. 1A-C). Infected area of the leaf is slightly thicker than surrounding tissue. Leaf infection occur in the spring on the earliest foliar growth, but later-emerging foliage do not show additional symptoms.



**Figure 1.** Exobasidium leaf and fruit spot symptoms on wild blueberry leaves (A), upper surface (B) and underside (C) of the leaves.

Fruit spots on infected berries are green, mostly circular and 2-10 mm in diameter (Fig. 2). As the berries ripen and turn blue, the spots remain green and become clearly visible. Infected berries are unmarketable.

Little is known about the life cycle and epidemiology of the pathogen in wild blueberry. A recent study from Southern US has shown that the pathogen overwinters on high bush blueberry plants in the field. Overwintering of the pathogen in wild blueberry fields is probably like overwintering on high bush blueberry plants. Infection by the pathogen is favoured by extended periods of wetness and occurs early in the spring on young, recently emerged leaves and green fruit.



**Figure 2.** Exobasidium leaf and spot symptoms on wild blueberry fruit (visible light green fruit spots).

Recent years we have observed an increase in the incidence of exobasidium leaf and fruit spot in wild blueberry fields in the province. The New Brunswick Department of Agriculture, Aquaculture and Fisheries conducted surveys in 2018 and 2019 to determine the extent of the spread of the disease in New Brunswick blueberry fields. Of the 16 fields surveyed in 2018, 5-30% disease incidence was observed in 5 fields and the remaining 10 fields had 1-3% disease incidence. There was only one field where no exobasidium leaf and fruit spot was observed. Of the 17 fields surveyed in 2019, 5-43% disease incidence was observed in 9 fields and 6 fields had 1-4% disease incidence. No exobasidium leaf and fruit spot was observed in two fields. Currently there is no fungicide product registered to control exobasidium leaf and fruit spot, but fungicides applied for other disease may help suppress exobasidium infection.