



V1.0 – 10/01/2022

Monilinia

Monilinia overwinters in mummified fruits and infected tissue on trees. Infected blossoms, young twigs and leaves, and infected ripening fruits serve as secondary inoculum source.

Inoculum

The model assumes that spore inoculum for infections by Monilinia is always present in the orchard.

Germination, infection, and susceptibility

Weather conditions frequently allow these spores to germinate and potentially infect plant tissue.

Stone fruits are highly susceptible to infections by Monilinia during bloom leading to blossom blight. Young fruits are resistant, but susceptibility gradually increases during fruit development. During the last 2-3 weeks before harvest susceptibility strongly increases.

The coincidence of potential infection events, and temporary periods of high susceptibility of flowers and fruits determines when infections actually occur. Accurate setting of the flowering dates and growing period for early-, mid -and late cultivars is necessary for correct simulation of temporary susceptibility and relevant infection events.

Infection severity increases with temperature and wetness duration. The function for the relation between temperature and infection development was deduced from results of several scientific studies.

Survival of spores during dry intervals

The loss of viability of germinating spores during a dry interval is depending on the VPD during the dry hours and modelled using data published by Grindle in 1961.