

*Connecticut Agricultural Experiment Station*  
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VARIETAL SUSCEPTIBILITY OF APPLES TO DISEASES  
AND INJURIES.

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Some varieties of apples suffer more from certain fungous diseases than do others in the same orchard. When experience shows this as a common trait with the variety, we say that it is very susceptible to the disease. Such, for example, is evidently the case of Fall Pippin and McIntosh with relation to Scab, and of the Wealthy to Rust. The same thing holds true with regard to certain of the injuries, or so-called *physiological* troubles, not due to either fungi or insects. For example, Bitter Pit (locally known as Baldwin Spot), is most serious on the Baldwin Apple, and Water Core on the King.

Some of these troubles, especially those not due to fungi, are not controlled by spraying, while Spray Leaf Burn and Fruit Russet are the direct outcome of spraying. Most of them, however, yield more or less completely to intelligent spraying. It behooves the grower, then, to know beforehand what are the troubles in his orchard, and what varieties are especially attacked. With this idea in view we compiled a list of apples more commonly grown in the state, and from our experience listed the diseases and injuries found most frequently on them. We then submitted this list to about forty apple growers for their opinion. The list that follows is based upon the combined data obtained.

Pick out from the list the varieties grown by you and note the diseases that more commonly occur; then spray with reference to them. Watch your apples the coming season and acquaint yourself definitely with the troubles of each variety. Insects are more general in their attacks, so we have not included them here, but it is just as important that you know what insects are common in your orchard, and include them in your fight for good fruit.

In this list we have printed in *italics* the non-parasitic injuries, and have listed these and the principal diseases under each variety in the order of their importance as near as we could. In general it can be stated that the four worst diseases of apples in this state

are: Scab, Brooks Fruit Speck, Rots (all kinds), and Sooty Blotch; and the three most serious injuries are: Winter Injury, Bitter Pit and Spray Russet.

**Astrachan**—Brown and Black Rots (bad), Scab.

**Baldwin**—*Bitter Pit* (bad), Brooks Fruit Speck (bad), *Spray Russet* (bad), Sooty Blotch, *Winter Injury*, Scab (little).

**Ben Davis**—Rust, Scab, *Spray Russet*.

**Crabs**—Scab (bad), Rust.

**Delicious**—Scab, Rust.

**Duchess**—Brooks Fruit Speck, Bitter Rot.

**Early Harvest**—Scab.

**Fall Pippin**—Scab (bad), Fire Blight.

**Fallawater**—Rust.

**Fameuse**—Scab (bad), Sooty Blotch.

**Gravenstein**—Rot, Scab, Brooks Fruit Speck.

**Greening**—Sooty Blotch (bad), Scab (bad), *Spray Russet* (bad), Blue Mold and Black Rots, Fire Blight.

**Hubbardston**—Rust, Brooks Fruit Speck, Scab, *Bitter Pit*.

**Hurlbut**—Black Rot, Brooks Fruit Speck, *Bitter Pit*, Fire Blight.

**Jonathan**—*Jonathan Spot* (bad), Rust, Brooks Fruit Speck.

**King**—*Water Core* (bad), Brooks Fruit Speck, *Barrenness*.

**McIntosh**—Scab (bad), Black Rot.

**Northern Spy**—Brooks Fruit Speck (bad), Scab, Sooty Blotch.

**Opalescent**—Scab, Brooks Fruit Speck, Fire Blight.

**Peck's Pleasant**—Rust.

**Pound Sweet**—*Water Core*, Brooks Fruit Speck, Scab.

**Rome Beauty**—Scab, Rust.

**Russet**—Rust.

**Stark**—Bitter Rot, Sooty Blotch, *Bitter Pit*.

**Sutton**—Rust, Scab.

**Tolman Sweet**—Sooty Blotch, *Bitter Pit*, Brooks Fruit Speck.

**Wagener**—Brooks Fruit Speck, Limb Canker.

**Wealthy**—Rust (bad), Brooks Fruit Speck.

**Winter Banana**—Rust.

**Wolf River**—Rust, Black Rot, Scab.

**Yellow Transparent**—Scab.

**York Imperial**—Rust.