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1. INTRODUCTION

Strawberries are a popular fruit crop worldwide. Over the years, the strawberry has been improved through breeding for characters of firmness, color, taste, and disease resistance. Strawberry yields and fruit quality are greatly influenced by interactions of environment, diseases, pests, and soil conditions.

There are many diseases affecting strawberry production. Despite genetic improvement, most varieties are susceptible to one or more diseases depending on their genetic background, climate, and cultural practices. Strawberry disease management can be complex because the plant may be assailed by pathogens in the soil (soilborne diseases) and in the air surrounding the plant (fruit and foliar diseases). Furthermore, different types of pathogens affect strawberries, like fungi, bacteria and virus. Nevertheless, it is possible to manage the most challenging diseases when varieties with desired disease resistance are combined with proper cultural practices and the use of fungicides. The objective of this section is to highlight the symptoms and disease cycles of the most common diseases that occur in strawberry fields, as well as the most appropriate management techniques.

2. SOIL-BORNE ROOT DISEASES

2.1. Verticillium Wilt

The fungi *Verticillium albo-atrum* and/or *Verticillium dahliae* that cause Verticillium wilt can be very destructive to strawberry plantings. Several common garden crops, such as tomatoes, potatoes, and peppers, are also susceptible to this disease. *Verticillium* is introduced into new areas on tools, farm equipment, and in the soil and roots of transplants. Once the fungus becomes established in a field, it may remain alive in the soil for up to 25 years, surviving between cultivated crops and on susceptible weeds. Verticillium wilt often appears in new strawberry plantings when runners begin to form. In older plantings, the symptoms usually appear just prior to picking.

Symptoms. The symptoms on aerial plant parts vary with the susceptibility of the variety and cannot be easily distinguished from those of red stele, black root rot, or winter injury. Older leaves slowly or rapidly droop, wilt, turn dry, and become reddish yellow or dark brown at the margins and between the veins. Few new leaves develop and if new leaves are formed they are stunted and