whole plant dies quickly; but I have noticed the same balls formed on the outside of the stalk, much smaller, but in greater numbers. In this case the plant usually dies off stalk by stalk. Nos. 2, Gaillardia; 3, sweet pea; and 4, dahlia: The disease on each of these seems to be much the same.

The Biologist replies,—

The specimens of diseased gaillardia, sweet pea, and dahlia are attacked by stalk sclerotium. This disease is probably parasitic on a greater number of different kinds of plants than any other fungus, members of all the families of cultivated plants being attacked, white and swede turnips, cabbages, carrots, broad and haricot beans, potatoes, cucumbers, melons, hemp, petunias, zinnias, pelargoniums, chrysanthemums, dahlias, sweet peas, &c., being among the number of its victims. The disease commonly attacks the stem, commencing as a white mould at the ground-line and working upwards. When the parasite has been at work for some time the leaves turn yellow and wilt, and finally the stem collapses, death being due to lack of food and water, owing to the mycelium of the fungus having chocked up the vessels, and thus retarded the passage of water up the stem. When the stem is hollow the mycelium is produced in considerable quantity in the cavity, and forms large numbers of sclerotia, varying in size from turnip-seed to that of a pea, white, then black externally. When the stem is solid the sclerotia are formed in its substance, and visible on the surface. If diseased stems are allowed to lie and decay on the ground, or even if they are placed on a heap in some out-of-the-way corner, the sclerotia remain on the ground when the stems decay, and the following spring give origin to several brown funnel-shaped ascophores borne on long, slender stems. The spores from these fungi affect plants on the spot, or are blown about by wind and start the disease in a new locality.

In the case of plants producing tubers or fleshy roots, as mangels, turnips, potatoes, &c., the mycelium also passes downward into these parts, and eventually forms sclerotia, more especially if sweating occurs after storing. If such infected tubers, &c., are planted, disease follows.

Diseased stems should be burned, and not allowed to lie about, for the reasons given above. In flower-beds, &c., where this disease has previously existed, 2 in. of the surface soil should be removed, and replaced by fresh soil mixed with a little quicklime. Green stable manure favours the disease.

Woolly Aphis.

Mr. G. H. Bonnington, 142 Ferry Road, Christchurch, writes,—

Can you suggest a check for the blight on apple-trees—woolly aphis. This blight is very severe in the Canterbury District this season. My Ribston Pippins and Cox's Orange Pippins suffer severely. I have tried kerosene emulsion and McDougall's insecticide, but they only partly destroy the pest. I understand the Orchard Expert at Weraroa Experimental Farm has discovered a cure for this blight; if so, it will be a big benefit to orchardists, and I feel sure would be eagerly sought after by Canterbury fruitgrowers.

The Orchards, Gardens, and Apiaries Division replies,—

The following is the treatment recommended for the control of woolly aphis: Spray the trees in the winter, when quite dormant, with red-oil emulsion, using one part of the emulsion to fifteen parts of water. Paint any colonies that escape the winter spray with red-oil emulsion *undiluted*.

Cow Trouble.—Poa Aquatica.

Mr. G. S. Thomson, Otautu, Rawene, Hokianga, writes,—

1. When bringing in my cows this morning, one stopped suddenly, turned round two or three times, and then fell down in convulsions. The legs were kicked out violently, and the breathing was short and rapid, occasionally stopping altogether for about ten seconds. After some fifteen minutes the animal struggled to her feet, staggered about for some time, and finally appeared to recover. She remained standing