

or between the joints ; sometimes there are four or five larvæ in a single stalk, one above each joint for the first four or five joints from the ground, which cause the stalk to prematurely ripen or to wither, and thus occasion great loss. This insect, which is known as the "Wheat Isosoma," *Isosoma tritici*, Riley, has been observed for two or three years past, injuring the wheat in Illinois, Tennessee and Missouri, and has prevailed in some localities to such an extent as to ruin the crop. From the observations thus far made it seems that there is only one brood of this insect during the season, and that it passes the winter in the straw either in the larval or pupal state, the perfect flies appearing the following spring. Under these conditions the remedy is obvious, viz., burn both the stubble and the straw after harvest ; rotation of crops has also been found beneficial.

The cabbage crop has been materially injured by the ravages of the cabbage Anthomyia, *Anthomyia brassicæ*, a two-winged fly which in the larval state burrows in the stem of the young plant and causes its death. This cabbage insect is a native of Europe, is very troublesome in Britain and has been known as a destructive insect in this country for about thirty years, but nothing is known either of the date or the method of its introduction. The flies appear in the spring and deposit their eggs upon the stems of the young cabbages, about or a little below the surface of the ground. The eggs hatch in about ten days, when the young larvæ usually bore into the interior and work their way down towards the root; sometimes they merely gnaw grooves on the outer surface of the stem, and by this means find their way to the roots on which they feed. When full grown they change to yellowish red chrysalids in the earth, from which the flies shortly escape, the whole period of their life history thus briefly traced occupying about eight weeks. Usually the plants attacked soon wilt and finally die. It is believed that there are two or three broods of these insects during the year.

Several remedies have been recommended, such as dipping the roots and stems of the young plants in strong lye, or a mixture of earth and cowdung diluted with water, or a thick mixture of soot and water. Any bitter or alkaline substance which would adhere well to the outer surface would probably deter the flies from depositing their eggs. Lime added to the soil in the proportion of 100 to 150 bushels to the acre, after ploughing, and well harrowed in so as to keep it near the surface, has proved a very effectual preventive measure, or even where the insects are