

white maggots will be found in burrows or galleries in the edible portion of the roots.

The adults which produce these maggots are small flies, resembling the ordinary house-fly in general appearance, but more slender and slightly smaller. They are represented above. They appear on the wing in very early spring, having developed from over-wintering puparia in the soil. They lay eggs on or near the crown of the plant on the level of the soil surface, as shown in the accompanying illustration.



Where the eggs are laid. - (After Gibson and Treherne, Ent. Branch Bull. 12, Dom. Dept. Agric., Ottawa.)

These eggs hatch in five to seven days into small larvæ or n. which penetrate the soil and attach themselves to the roots of the plant. Here the larvæ remain feeding and destroying the roots for from nineteen to thirty-two days.

It must be understood that all of the adult flies do not emerge from the soil in the spring at the same time. The process of emergence may be continued for over a month. As each female emerges she mates and proceeds at once to lay eggs. Thus we find a continuous and overlapping series of stages in existence. It may be possible, it can be seen, for the larvæ, which have developed from flies which emerged the earliest, to be nearly mature at the time the latest flies are emerging from the soil. This complex and difficult situation proceeds throughout the year, and results in the fact that some egg-