

## QUESTION DRAWER.

### Leached Ashes.

**905.** SIR,—My garden has been filled in about one foot from an excavation running from 2 to 3 feet, and the soil though not blue clay, is poor. I can get any quantity of leached ashes from an adjacent potash factory for 15 cents a load. I have already covered the garden one inch in depth, having put on about 28 loads, the garden being 60 feet by 100. Would it be advisable to haul more in the spring? Could I injure the land by too much?

It might be possible to give an overdose of unleached ashes, but in our opinion it would be quite safe to work in as much more of the leached ashes, and get beneficial results.

### Cutworms.

**906.** SIR,—Could you kindly inform me whether lime or salt is best suited for land where the cutworm does harm? Or do you know of anything better suited to destroy the cutworm? It was the worst enemy I had to contend with in my garden.

JOHN REID, *Everett.*

*Reply by Prof. J. H. Panton, O. A. C., Guelph.*

There are many species of cutworms, some of which are very troublesome in the garden and in the field. The moths from which they come lay their eggs during midsummer; these soon hatch and the larvæ feed upon the roots and tender shoots of plants. When cold weather arrives, they bury themselves in the ground and pass the winter. In spring they re-appear and become destructive. When the larvæ are full grown (about June) they go down into the ground and enter the pupa stage, from which they emerge about August, and deposit their eggs, often in grass fields, on the grass stalks. Hence they are usually found in crops following sod. They are not observed in the sod field, because they have plenty of food; but when the field is sown with a new crop, they at once become destructive, by feeding upon the young plants.

The larvæ (worms) are about one-and-a-half inches long, smooth, naked, and presenting a greasy-looking appearance. The color varies, but is generally some shade of green, gray, brown, or black; most are night feeders; when disturbed, they curl up at both ends. They eat off the plant at the surface or a little below, suck the juice from the lower part, and let the rest wilt. The moths usually have the front wings of a mottled gray appearance, with some spots; the hind wings are of a much lighter color. The expanded wings measure one to two-and-a-half inches across. The above is the life history of most cutworms.

### REMEDIES.

1. Fall ploughing, the earlier the better, so as to disturb and starve them before going into winter quarters. This refers to fields likely to be infested.

2. Plant with corn and use a top-dressing of salt. Salt to some extent kills the worms or drives them off and gives the plants a chance to get a good start.

3. Where practicable, poisoned baits may be used, such as small bunches of clover, cabbage leaves, etc., dipped in Paris green solution (1 lb. Paris green to 100 gals. water), and placed where worms will feed upon them and be destroyed.

4. Some make a mixture of 1 part Paris green and 50 parts bran (by weight), add water and mix, having it thick enough to dip out without dripping. A little sugar added to water improves the mixture. Cutworms are fond of this, and will eat the poison when put where they are.

5. Cabbage plants may be protected by putting a piece of paper around the stem, so as to prevent the worm getting at it.