

The results appear in the Table on page 405. In consequence of these experiments we came to the conclusion that there are three possible methods of field mice control in Palestine: 1) Zelio Wheat; 2) Hora; 3) Calciumcyanide. We prefer Zelio grains to the other methods. We carried out the Zelio grain experiments while the fields were covered with the first green of crops. At this time the mice refuse any other bait. If Zelio grains were efficacious under such unfavourable conditions we may hope for far better results if control is carried out in November-December. On the strength of the expense account (see Table, page 406) we propose the practical application of Zelio grains as a first step.

#### **The Dairy Herd at Ganeigar.**

(Survey of the Dairy Herd and Account of the first annual Examination).

by J. Kvashne (Extension Division) and J. Israely (Ganeigar).

The dairy herd at Ganeigar was established in 1922-1923. It is remarkable for many attributes:

1) The herd developed gradually in consequence of modest and careful purchases. Hence it was possible to introduce orderly and systematic selection from the first. At present 50% of the cattle in the herd are home grown.

2) The health conditions in the herd are very good because of the salubrious climate, the individual care given each animal, and because their feed is well ordered.

3) The milk yields has steadily increased from year to year for each cow. On the average it comes to over 3000 litres per annum. The average cream yield is 126 kg. per cow per annum. The average percentage of cream is about 4%.

#### **The Heredity in Relation to the Thickness of the Peel of the Jaffa Orange.**

by J. D. Oppenheim.

Investigations into the transpiration of the Jaffa orange have shown that transpiration does not decrease in inverse proportion to the thickness of the peel. There is practically no

difference in the transpiration of a thickpeeled or a thinpeeled fruit.

A statistical investigation of the fruits of 200 trees, 5 were taken from each tree, has shown that, although the thickness of the peel can easily be modified by irrigation and light (temperature?), the basis of this phenomenon is hereditary. There is quite a distinct difference between trees bearing thickpeeled fruit and those bearing thinpeeled fruit.

As consumers do not like thickpeeled fruit and even regard a peel of 7 mm. as thick, the growers are advised to take their budwood from trees, which grow under comparable—and not extreme—conditions bearing fruit which have a peel not much thicker than 6 mm. on the average.

### **Observation and Investigation of Seed Bed Diseases of Citrus Trees in Palestine.**

by Dr. I. Reichert and Dr. J. Perlberger.

#### **Damping-off Disease.**

We have found that the damping-off disease which is widely spread throughout the seed beds of Palestine appears in two forms:

1) **Root Rot.** The rootlets rot and their bark peels. The leaves become lightly yellow, and the seedlings die. This form of the disease was found on rather old seedlings.

2) **Crown rot.** In contrast to the preceding form, the leaves do not become yellow. Shortly before the death of the seedlings the leaves commence to droop, after which the seedlings fall and die. Dead seedlings are encircled at the crown by a brownish girdle. This form of the disease occurs especially among young seedlings.

Three fungi, *Rhizoctonia* sp., *Fusarium* sp. and *Alternaria* sp. have been isolated from both forms of the damping off disease (s. Fig. 1, 2, 3, p. 419-20). They have been found throughout the country wherever oranges are grown (see Tables 1 and 2, p. 421). In the course of observations lasting for three years, *Rhizoctonia* sp. was found 9 times in 5 different localities, *Fusarium* sp. 37 times in 17 different localities and