

Publication: Miller,D. 1923: The Fiji lemon-weevil (Frm.).
occurrence in some recent importations. *N.Z. J. AGRIC.:* 26
(1):34-35

This article has been provided by the BUGZ project and is for private use only and not for reproduction in any form etc, and we do not guarantee the quality of the scan, nor the correctness of the text layer relating to each page image.

Project coordinators: Raphael Didham & Stephen Pawson

Content scanning, OCR and cleanup by: Carl Wardhaugh, Katherine Wilson, Stephanie Kaefer, Chris Coleman, Murielle Rabone, Miriam Hall and James Aulsford

Interface and database developed by: Mike Cochrane & Mark Fuglestad

Project funded by: TFBIS (Terrestrial and Freshwater Biodiversity Information System)

(The pages of the publication follow this cover sheet)

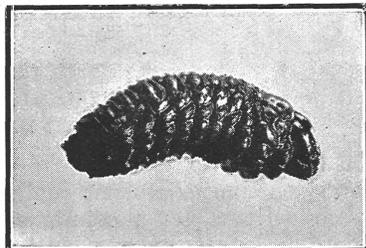
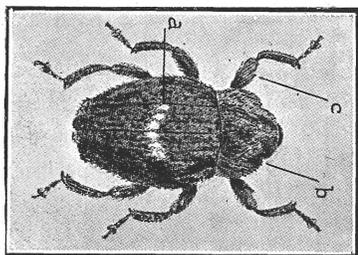
THE FIJI LEMON - WEEVIL (*ELYTROTEINUS SUBTRUNCATUS* FRM.).

OCCURRENCE IN SOME RECENT IMPORTATIONS.

DAVID MILLER, Entomologist, Wellington.

Two consignments of lemons landed at Lyttelton in June last from the Cook Islands were found by Mr. W. K. Dallas, Orchard Instructor at Christchurch, to be infested by the larvæ of some weevil. Specimens of the infested lemons were forwarded to the Department's Biological Laboratory for determination, and the larvæ were successfully reared to the adult. Specimens were sent to Dr. G. A. K. Marshall, Director of the Imperial Bureau of Entomology, London, who identified them as *Elytroteinus subtruncatus* Frm.

This weevil was first recorded from Fiji in 1881, and recently was found at Honolulu infesting the roots of the white ginger-plant (*Hedychium coronarium*), the authorities, in consequence, prohibiting the transportation of this plant throughout the Hawaiian Territory. The weevil has not been recorded heretofore upon lemons.



FIJI LEMON-WEEVIL.

Fig. 1. Adult, $\times 3\frac{1}{2}$ (after Marshall). Fig. 2. Larva, $\times 3$.

The adult weevil (Fig. 1) measures about $\frac{1}{4}$ in. long; the general colour is chestnut-brown owing to the chestnut-brown vestiture, although only the ground-colour of the thorax is of this colour, that of the wing-cases being black, seen along the numerous lines or striae which are destitute of vestiture. There are patches of snow-white vestiture on the upper surface of the body, and these are more distinct about the middle of the wing-cases, where they form a more or less distinct, transverse, slightly curved band (a). The posterior end of the wing-cases, which come well down over the sides of and curve slightly beneath the abdomen, is truncated, while the side margins of the thorax are notched just behind the head (b), the latter being practically concealed from above. On the under-side of the front femora is a distinct tooth (c). The snout or rostrum when at rest lies in a groove, which extends to between the articulation of the first pair of legs.

The larvæ (Fig. 2) are legless, of a creamy-white colour, with a distinct brown head, and measure about $\frac{1}{2}$ in. long when full grown. They are rather plump, the head end of the body being narrower, and they rest usually with the body more or less doubled.

Observations made at the Laboratory and by Mr. Dallas showed that the fruit was attacked at the base of the stalk, the larva working its way through the peel and tissue lying immediately thereunder; the core was also found to be attacked. As far as was observed there was never more than a single larva in one fruit, and as the point of entrance was not discernible it is probable that the female punctured the base of the stalk and laid her egg therein. Pupation took place in the fruit, and if the latter decayed before the adult developed, its emergence was greatly hindered or even prevented.

COLLAR-ROT IN PEA CROPS ON THE WAIRAU PLAIN.

SOME CAUSES AND PREVENTIVE MEASURES.

F. W. GREENWOOD, B.A., Instructor in Agriculture, Wellington.

CONSIDERABLE concern has been caused this season among farmers on the Wairau Plain, Marlborough, because of the failure of many of the pea crops, consequent upon the ravages of the *Fusarium* fungus disease commonly known as collar-rot. This disease begins by causing the stem to rot just above the crown. As it spreads it reaches the root, soon causing the latter to become a putrid mass. It also extends vertically up the stem, causing the leaves to wilt and the plant finally to die. Infection is conveyed through the medium of the seed and straw, but rarely through the soil. Early in November last I inspected a large number of crops in various parts of the Blenheim district, and found fully 90 per cent. of them to be infected with this disease. The chief varieties inspected were Dwarf, Medium Straw, and Partridge. Of these the Dwarf variety seemed to be suffering most seriously, while Medium Straw seemed to withstand the attacks of the disease better than did Partridge crops.

Probably Marlborough pea crops have been more or less affected with this disease for years, but it has become more pronounced than usual this season. Some of the reasons for its additional severity this year are fairly obvious:—

1. The warm humid weather which was experienced in the spring has favoured the growth of the fungus-spores.
2. In the Spring Creek district, where the disease is most pronounced, the worst failures are on badly drained and sour soils.
3. The practice of manuring a soil year after year with superphosphate alone has been prevalent among some of the farmers. This has had the effect of gradually exhausting the lime content of the soil. Through sour-soil conditions the plant has been so weakened as to be less able to withstand the attacks of the disease.