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THE BEAN WEEVIL (Bruchus obtectus, Say).

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An insect which, fortunately, has only been reported on a few occasions as doing damage in Canada, is the Bean Weevil, *Bruchus obtectus*, Say. Authentic instances of injury by this insect have been received from one locality in Ontario, and from two in Quebec. The injury in all cases was to seed beans.

The Bean Weevil (Fig. 48) is a small, hard-shelled beetle, one-tenth



of an inch long, oval in form, with the head bent down and more or less concealed, as seen from above, and prolonged into a squarely-cut snout, or beak. Its antennae are distinctly jointed and enlarged at the tip, the first four joints and the last one reddish. The wingcovers are marked with ten impressed and dotted longitudinal lines, and the whole body is covered with short, silky hairs. The lines on the wing-covers are broken up into pale

yellowish dashes and dark brown spots. The tip of the abdomen extends beyond the wing-covers, and is of the same reddish tinge as the tips of the antenna and the legs, but is covered more or less with short, silky hairs, and bears a central white line, but there is no appearance of the two black spots so conspicuous in the Pea Weevil, which it resembles in shape and movements. Compared more closely with this latter well-known insect, the Bean Weevil is not one-half so large, is more soberly coloured, having less white on the wing covers, and lacks the white spot on the middle of the hinder part of the thorax, and the two oval black spots mentioned above, which are present on the exposed tip of the abdomen of the Pea Weevil.

"The life-history of the Bean Weevil differs in some important points from that of the Pea Weevil. The eggs of both are laid upon the pods while these are young and tender. On hatching, the young grub of the Bean Weevil eats its way inside and penetrates one of the forming beans, several grubs entering a single bean, each one forming for itself a distinct cell. They become full-grown, and change to pupe in the autumn, and a little later to the perfect beetles. The date of emergence

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