

which is much larger. The latter is black above, with a white band down the middle of its back, and two white stripes on each side of its head, in addition to which the male has a scarlet crest. Both these are commonly called sap-suckers, which is considered an unmerited title.

THE MOUSE.—In "Notes on the Mouse," I stated that I believed the species *Arvicola riparius* to be the most common kind found in the orchards of the Canadian fruit grower. Perhaps this may not be the case everywhere in Ontario, but in our own section, (Lincoln County,) it is certainly one of the most numerous species. To make sure about the matter, I sent some specimens for identification to Prof. R. Ramsay Wright, of the University College, Toronto, whose kindness in this respect I have before acknowledged. They were captured in the orchard, under some corn stalks, where they had made their nests and gathered a store for their young; but whence they were ready to make predatory excursions among the trees. The tail is very short, giving rise to their common name, "the Short-tailed Meadow Mouse." Prof. Wright says: The (first) specimens belong to the species *Arvicola riparius*; order, meadow mouse. These seem to agree well with the long haired variety (*longipilis*) described by Baird, which is perhaps only the winter dress. The tail is a trifle shorter in proportion to the length of the body than Baird describes. He mentions that species of the genus have proved destructive in America to young trees, but does not specify any one in particular. Prof. Wright also refers to Dr. Cone's monograph of the Rodentia for more detailed information; and adds that he will gladly render any further service in the identification of Canadian specimens of natural history.

EFFECTS OF FROST ON PLANTS AND SOILS.

BY P. E. BUCKE, OTTAWA.

The past summer season has not been the brightest on record for the fruit cultivator of this section. The winter of 1877-8 was marked by an unusually small snow-fall, and the consequence was that our cultivated raspberries suffered very severely, and especially Brinkle's Orange, which proved almost a total failure. I may remark *en passant* that though this plant is one of the most delicate of the raspberry class, it stands the climate here about as well as the hybrid or moss