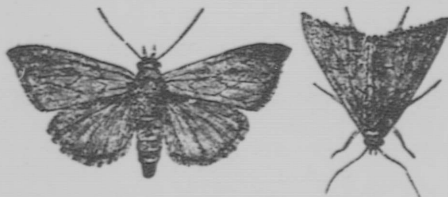


swarms appeared at Hamilton on October 7th. In the year 1903, on October 5th and 8th, the late Dr. Fletcher and the writer when "sugaring" for noctuid moths, at the Central Experimental Farm, collected many specimens of this moth which had been attracted to the trees upon which the "bait" had been applied.

The fact that these moths migrate to Ontario in autumn from the Southern States is most interesting. The remarkable thing too, is that large numbers of the specimens are in such perfect condition, that one wonders how the moths make such long flights without in some way damaging themselves. Their wings, however, are very closely-scaled, so can withstand considerable knocking about.



THE COTTON MOTH, (AFTER RILEY).

The figure herewith shows the Cotton Moth, with the wings spread, and also illustrates its habit of resting with its head downward. In colour it is brownish-yellow with a purplish sheen. On the front wings are indistinct wavy transverse lines and

near the centre of each a conspicuous dark spot, paler in the middle.

The caterpillars of this moth have caused enormous losses in the cotton fields of the south. Before the year 1873, annual losses from the ravages of the Cotton Worm amounted to millions of dollars, in fact in certain years of general prevalence of the worm, the loss totalled as high as \$30,000,000. Since the above year, however, the insect has been kept largely under control by a change in cultural methods and the use of Paris green and other arsenical poisons. The caterpillars are, therefore, not now, nor have they been for some years, a serious factor in cotton growing.

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#### THE NATURE OF PARASITIC FUNGI AND THEIR INFLUENCE UPON THE HOST PLANT.

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By H. T. GUSSOW, DOMINION BOTANIST, OTTAWA.

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By far the largest number of fungi causing plant diseases are of microscopic character, hence I will confine my remarks exclusively to this large enough group. The average fruitgrower's and the average farmer's acquaintance with microscopic fungi,