

RELATION OF WEATHER TO CHINCH BUG INCREASE.

A succession of dry summers, especially during the months of May and June, thus covering the hatching period, is likely to induce an outbreak. On the other hand, a very wet spell at hatching time may be sufficient to overcome a bad attack, but this is not always the case. The rains drive many of the young bugs to the ground, and bury them in the mud, compacting the soil around them and permanently covering them. Wet weather also favours the development of fungous diseases among them.



FIG. 3.—Chinch Bug in fourth stage, previous to final moult
(Original. Enlarged twenty times).

PREVENTION.

As the Chinch Bug hibernates under rail fences, tree trunks, tufted grasses, and rubbish of all descriptions, *clean farming*, coupled with *regular rotation of crops*, is at once suggested. So far as may be practicable, burn over all waste places; burn all rubbish as late in the fall as possible so as to expose the hibernating insects to the rigours of the winter. To be effective, the burning must be done thoroughly, otherwise little or no good will result. It is necessary to burn right down into the crowns of the grass. As this is usually impracticable on a large scale, and often impossible owing to the weather, the only safe measure is to thoroughly deep plough an infested pasture as late as possible in the fall, being careful to turn under every bit of grass, and plant the ground to a hoed or leguminous crop the following spring. As most of the infested meadows and pastures are adjacent to wood lots in which the greater part of the bugs hibernate, it seems reasonable to believe that if a strip of land, next to the wood lot, was ploughed early in the fall and planted to wheat, it would serve as an excellent bait crop for the bugs coming out of their winter quarters. An inviting food would be at first hand, the eggs would be deposited on the wheat plants, when the whole could be promptly destroyed, including, of course, the bugs, by efficient ploughing and immediately rolling the ground.