EIGHTEENTH REPORT OF THE STATE ENTOMOLOGIST ON THE NOXIOUS AND BENEFICIAL INSECTS OF THE STATE OF ILLINOIS. SEVENTH REPORT OF S. A. FORBES FOR THE YEARS 1891 AND 1892 Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649692101

Eighteenth Report of the State Entomologist on the Noxious and Beneficial Insects of the State of Illinois. Seventh Report of S. A. Forbes for the Years 1891 and 1892 by S. A. Forbes

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S. A. FORBES

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For the Years 1891 and 1892

Reprinted by authority of the State of Illinois.

SPRINGFIELD, ILL.
ILLINOIS STATE JOURNAL Co., STATE PRINTERS.
1920

22567-1M

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LETTER OF TRANSMITTAL.

OFFICE OF STATE ENTOMOLOGIST, CHAMPAIGN, ILL., Dec. 21, 1892.

To His Excellency, Joseph W. Fifer, Governor of the State of Illinois.

Sir: I have the honor to transmit herewith my seventh report as
State Entomologist of Illinois,—the eighteenth from this office,—applying to the years 1891 and 1892.

I have had for some time the intention to present in my entomological reports a complete monograph of all insect injuries to Indian corn, to contain, when completed, not only an abstract of all published knowledge on the subject, but likewise all our own unpublished observations accumulated during the past ten years. Believing that I could at present do the agriculture of this State no other service approaching this in value, I have prepared, as the greater part of this report, a first instalment of this treatise, consisting of a discussion of all insects injuring the planted seed and the roots of Indian corn.

Respectfully submitted.

S. A. Forbes, State Entomologist.

GENERAL RECORD FOR 1891 AND 1892.

The economic entomology of the years 1891 and 1892 has presented in Illinois scarcely a single notable feature, all crops having been, on the whole, unusually free from insect injury, and no very serious danger

threatening at any time.

The most interesting item of our record was the attack on young corn made in May and June, 1891, throughout the greater part of the State, from extreme Northern Illinois to Bunker Hill, but especially in the central and southern counties, by a small black jumping flea-beetle, Chatocnema pulicaria, previously wholly insignificant as a corn insect. From five to ten or more of these beetles might sometimes be found on a single blade of young corn not more than five or six inches high, and the damage done was often so great as to give a yellow look to the entire field, due to the deadening of the terminal part of the leaf beyond the spots affected by the microscopic gnawing of those beetles. The injury . was magnified by the cold weather of the season, during which the corn made very little growth; and it practically vanished with the advent of good growing weather.

The CHINCH BUG, which in 1889 and 1890 had very nearly disappeared as an important factor in the agriculture of this State, has begun

during the two years just passed again to take the upward turn.

The almost uniformly high temperature of the spring and summer of 1890 and 1891 in northern and in southern Central Illinois, combined with light rainfall, amounting in some counties to little less than continuous drouth, favored its development unusually in these sections. .

South of Central Illinois, the region affected in 1891 was a belt of counties extending from about the line of the Ohio & Mississippi Railroad northward to the latitude of Springfield, and local injury seemed likely for some distance north of this. In the north, the infested district was a roughly triangular area in the northeastern corner of the State. of which Stephenson county marks the western angle and Kankakee county the southern. The distribution of injury within these limits was, of course, extremely variable, as is shown by the following examples of field notes and correspondence for 1891; first for Southern Illinois, and then for the northern part of the State.

Washington.-Nashville, July 8. "Very destructive to corn in places." Dec. 7. Bugs generally diffused in limited numbers. Ashley, Dec. 7. Bugs generally diffused. Injury to wheat slight; corn more hurt.

CLINTON.—Carlyle, April 8 and 9. Hibernating in rail fences, corn shocks, Second year here. Corn and wheat suffered some in 1890. Dec. 11. etc. Second year here. Co. A few bugs. No harm done.

Manon.—Vernon, July 1. "Leaving wheat for corn. Threaten injury."

Salem, Dec. 9. A few bugs in corn. Odin, Sept. 27. In large quantities in one field of corn. Dec. 10. Locally abundant.

Bond.—Greenville, June 27. "Corn alive with them." Dec. 3. Reported

present in limited numbers last season. Effects seen mostly on corn;