and America. I believe, with this paper, to have discussed the principal points where Lederer cannot be followed. I may say, in conclusion, that my former use of *Parastichtis*, Hübn., Verz., type suspecta, is warranted, since the other species follow didyma to Apamea, Ochs., 1816, nec Lederer.

## SOME SPECIES OF DIPTERA INHABITING OR FREQUENTING THE WHEAT FIELDS OF THE MIDDLE WEST.

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The swarms of small Diptera that are to be found in the fields of fall wheat in Ohio, Indiana and Illinois, during late autumn and in early spring, seldom fail to attract the attention of the entomologist who has occasion to visit these fields at the above mentioned seasons. That some species are attracted to these fields as mere visitants is indicated by the accompanying list, but that many others breed there, either upon the living or the dead portions of the wheat plants, is as clearly apparent.

It has been my custom each year to sow a small patch of wheat as early as possible, in order to attract the various inhabitants among insects, in order to study them. In August, 1897, a small plat of wheat was sown at the Experiment Station at Wooster, Ohio, and late in the fall, under my direction, a large number of these plants were transferred to a breeding cage in the insectary, and the results of this breeding were carefully watched by my former assistant, Mr. C. W. Mally. During the following April the various experiment plats of wheat were swept with an insect net and the results properly preserved.

From the wheat plants enclosed in a breeding cage, in the insectary, there emerged, during December, the following species of flies:

Cecidomyia destructor, Say.

Cecidomyia, sp.? Diplosis, sp.?

Sciaria, sps.? (2)

Phorbia ruficeps, Zett.

Phorbia cinerella, Fallen.

Meromyza Americana, Fitch.

Oscinis dorsata, Loew.
Oscinis coxendix, Fitch.
Oscinis umbrosa, Loew.
Oscinis carbonaria, Loew.
Oscinis trigramma, Loew.
Ceratomyza dorsalis, Loew.

From the same lot of wheat plants there appeared during the following April:

Diplosis, sp.? Chironomus, sp.?

Oscinis carbonaria, Loew. Bibio pallipes, Say.

Sweeping the wheat plats during April gave us the following species, some of them being, clearly, mere visitants:

Sciara, sps.? (2)
Rhamphomyia, sp.?
Bibio albipennis, Say.
Chironomus, sp.?
Phora pachyneuron, Loew.
Phora spinipes, Coq.
Phora, sp.?
Phorbia ruficeps, Zett.
Phorbia cinerella, Fallen.
Phorbia, sps.? (3)
Borborus equinus, Fallen.
Limosina crassimana, Haliday.
Diastata nebulosa, Fallen.
Elachiptera longula, Loew.
Oscinis coxendix, Fitch.

Drosophila funebris, Fabr.
Tetanocera pictipes, Loew.
Sepedon armipes, Loew.
Scatophaga furcata, Say.
Scatophaga stercoraria, Linn.
Hyelomyia, sps.? (3)
Anthomyia, sp.?
Schoenomyza dorsalis, Loew.
Cænosia verna, Fabr.
Cynomyia cadaverina, Desv.
Myospila meditabunda, Fabr.
Pollenia rudis, Fabr.
Lonchoptera punctum, Meig.
Lonchoptera lutea, Panzer.

The determinations of the species, included in these lists, were made for me by Mr. D. W. Coquillett, through the kindness of Dr. Howard. It has, until recently, been almost impossible to get satisfactory determinations of our smaller species of Diptera, and the foregoing lists are good illustrations of the constantly increasing value, to the workers in applied entomology, afforded by the Department of Insects at the U. S. National Museum.

The University of the State of Missouri is to send an Entomological Expedition into Southern Mexico this summer. It will be in charge of Prof. J. M. Stedman, head of the Entomological Department, and will have for its object the making of a biological (largely entomological) survey of the region from Vera Cruz on the Gulf, which is in perpetual tropics, to the top of the volcano Popocatepetl, which is far above the perpetual snow line, and down to Acapulco on the Pacific. This will give all the temperature variations from perpetual tropics to perpetual snow, and will allow of the study of life zones under conditions not to be found elsewhere in North America. The collection will become the property of the University, which is to furnish half the expenses, the other half to be borne by Prof. Stedman.