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SOME RESULTS OF DESULTORY COLLECTING OF INSECTS IN KANSAS AND COLORADO.

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N spite of the fact that a person may be regularly employed in entomological work, he may not have opportunities to do personal collecting of insects any more than one who is otherwise engaged. When one is steadily occupied throughout every working-day, only such time as comes outside of prescribed hours of work permits the undertaking of separate or distinct pursuits of individual concern or diversion. Nevertheless, a great deal can be accomplished in any line by improving odd periods of leisure. One advantage which entomology has over other studies in natural history is that collections of specimens can be made at night as readily as by day. Much spare time that can be utilized for day collecting is afforded during holidays, vacations, excursions or on visits; in fact, occasions frequently occur which invite the insect collector to go forth with net and bottles. of even an hour can be advantageously spent in this manner. Unlike the hunter or fisherman, he need not seek the wildest haunts in nature, for an abundance of varied forms generally await him ready at hand whether he is situated in country or city. Records of local collecting done even in a small way often have a value proportionate to those of more extensive collecting; besides, additional merit may be rendered if detailed particulars are given.

Little by little, here and there, whenever a chance is offered, by day or by night, considerable material will be accumulated in the course of a year or two by persistent collecting

of insects. The results of such efforts will mainly comprise an assortment of widely diversified forms rather than many representatives of any particular group, unless attention is devoted exclusively to certain kinds. No matter how disconnected one's operations may become regarding place, time or other conditions in collecting, the final outcome, through skilful classification of the specimens, can be presented with system and order.

What I consider as my personal collecting, to which all my records pertain, unless in reference to metatypes of two newly described species, has been done aside from any connection with the expeditions undertaken by Dr. F. H. Snow for the University of Kansas. Thus restricted, my efforts have been confined to portions of Kansas and Colorado, with the advantage, of course, in favor of my home locality, where night work was engaged in to a great extent. Only spare time in any instance has been thus employed. All of my specimens, with few exceptions in cases of common duplicates, have been added to the entomological collections of the University of Kansas, and from those that are identified I have prepared the following lists of their names, together with records regarding the capture of each species.

LIST OF HEMIPTERA-HETEROPTERA.

Wherever I have collected these insects, rich results were obtained, even at home. The greater part of my collecting in Colorado was done during a visit of six weeks, in the months of July and August, 1894, principally in Colorado Springs. All other collecting in this state has been done subsequently on trips of short duration. A list of the determinations of species in the order Hemiptera from my first collection in Colorado, and also some undetermined specimens, since all could not be readily identified at the time, were furnished to Profs. C. P. Gillette and C. F. Baker, at their request, by Mr. W. A. Snow, of the University of Kansas, thereby granting them the benefit of the results of study for incorporation in their work entitled "A Preliminary List of the Hemiptera of Colorado." which appears to the colorado of the colorado.

Family OSCINIDÆ.

Chlorops palpalis Adams. Kansas, Douglas county; May, twilight. New

pullipes Coq. Kansas, Sedgwick county; September, sweepings in pear orchard.-Colorado, Tabernash; August. Colorado

scabra Coq. Colorado, Tabernash; August.

unicolor Loew. Kansas, Douglas county; June, twilight. Sedgwick county; September.

variceps Loew. Colorado, Green Mountain Falls; July.

Iippelates flavipes Loew. Kansas, Douglas county; June. Sedgwick county; April. New to Kansas.

plebeius Loew. Colorado, Colorado Springs; August.

pusio Loew. Kansas, Douglas county; June, twilight; August. Sedgwick county; April. New to Kansas.

lachiptera costata Loew. Kansas, Douglas county; April, May, June; June, twilight. Sedgwick county; April.-Colorado, Colorado Springs; August.

longula Loew. Kansas, Sedgwick county; April.

scinis carbonaria Loew. Kansas, Douglas county; April, at night; May, at night. New to Kansas.

coxendix Fitch. Kansas, Douglas county; April; June, twilight. Sedgwick county; April. New to Kansas.

decipiens Loew. Kansas, Douglas county; July. New to Kansas.

nudiuscula Loew. Kansas, Douglas county; August.

pallipes Loew. Kansas, Douglas county; June, August.

soror Macq. Kansas, Douglas county; May, June. New to Kansas. variabilis Loew. Kansas, Douglas county; June, twilight; July.

Family DROSOPHILIDÆ.

osophila (Scaptomyza) adusta Loew. Kansas, Douglas county; May, at night; August. New to Kansas. - Colorado, Colorado Springs;

amœna Loew. Kansas, Douglas county; April. New to Kansas. ampelophila Loew. Kansas, Douglas county; August, October, November; noxious in kitchen and other rooms of house wherever fruit and cider were exposed.-Colorado, Denver; August; attracted to exposed fruit on table in house, both day

funebris Fab. Kansas, Douglas county; May; June; July; July, twilight; October; November, in kitchen. New to Kansas.

(Scaptomyza) graminum Fal. Kansas, Douglas county; April; April, at night. New to Kansas.

Family AGROMYZIDÆ,

omyza diminuta Wlk. Kansas, Douglas county; May; June, twilight d at night. New to Kansas. - Colorado, Denver and Colorado Springs: TUCKER: COLLECTING INSECTS.

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Family AGROMYZIDÆ.

Agromyza meneiventris Fal. Kansas, Douglas county; July. New to Kansas, parvicornis Loew. Kansas, Sedgwick county; April. New to Kansas.

Desmometopa latipes Meigen. Kansas, Douglas county: June. New to Kansas.

> m-nigrum Zett. Kansas, Douglas county: June. New to Kansas.

Ophthalmomyia lacteipennis Loew. Kansas, Sedgwick county; August, in windows of farmhouse. New to Kansas.