

A LIST OF THE FULGOROIDEA (HOMOPTERA) OF SOUTHERN ILLINOIS

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ABSTRACT

A list of the fulgoroidea of southern Illinois is presented with information on their distributions within the state.

Southern Illinois, defined here as that part of the state south of a line from St. Louis, Missouri, to Vincennes, Indiana (Fig. 1), contains four physiographic provinces, is rich in floristic diversity, and exhibits overlapping vegetational patterns (Mohlenbrock and Voigt 1959, Voigt and Mohlenbrock 1964). Included within southern Illinois are many state parks and forests, the Shawnee National Forest, and the LaRue-Pine Hills Ecological Area. To our knowledge, only two faunal studies have dealt with the insects of this region (McPherson and Mohlenbrock 1976, McPherson 1978). This paper presents a list of the Fulgoroidea (planthoppers) of southern Illinois and includes the distribution of each species within the state.

MATERIALS AND METHODS

During the past two years (1978-1979), we examined nine insect collections (see acknowledgments) that contained fulgoroid specimens from southern Illinois (including the Entomology Collection, Zoology Research Museum, Southern Illinois University, Carbondale). Table 1 lists the planthopper taxa and the southern counties in which each species has been collected. If a species has been found in more than five counties it is listed as "generally distributed." State distributions are divided into four categories as defined in Table 1.

RESULTS

We identified 107 species (42 genera, 9 families) from southern Illinois, which represent about 69% of the Illinois planthoppers (unpubl. data). Of these, 27 appear to be confined to southern Illinois, 35 occur primarily in the southern half of the state, five primarily in the northern half, and 40 occur statewide.

The major faunal surveys published within about the last 50 years include Ohio with 105 species (Osborn 1938), North Carolina with 123 (Brimley 1938, 1942; Wray 1950), Connecticut with 65 (Britton 1923, 1938), and Mississippi with 66 non-delphacid fulgoroid species (Dozier 1928; compared to 77 for southern Illinois); Metcalf (1923) included 304 species in his planthoppers of eastern North America. A valid comparison of these surveys with that of southern Illinois is difficult, however, because of revisionary studies that have been published in recent years. Nevertheless, the planthopper diversity of this part of Illinois appears to be high.

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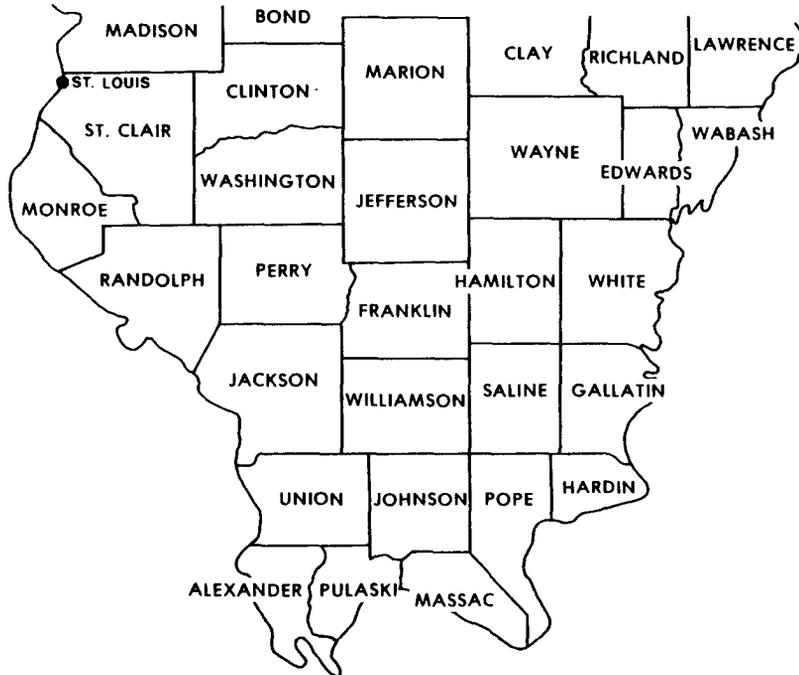


Fig. 1. Counties of southern Illinois.

Table 1. List of the Fulgoroidea of southern Illinois

Taxon	Southern Illinois County Records	State Distribution ^a
Acanaloniidae		
<i>Acanalonia bivittata</i> (Say)	Gen. dist.	4
<i>A. conica</i> (Say)	Gen. dist.	4
Achilidae		
<i>Catonia carolina</i> Metcalf	Hardin, Massac, Pulaski	1
<i>C. cinctifrons</i> (Fitch)	Union	2
<i>C. nava</i> (Say)	Pulaski, Union	4
<i>C. pumila</i> Van Duzee	Gallatin, Union, Washington	4
<i>Epiptera opaca</i> (Say)	Alexander, Jackson, Pope	4
<i>E. variegata</i> (Van Duzee)	Jackson, Williamson	2
<i>Synecdoche impunctata</i> (Fitch)	Pope, Union, Williamson	4

Table 1. (Continued)

Taxon	Southern Illinois County Records	State Distribution ^d
Cixiidae		
<i>Bothriocera signoreti</i> Stål	Pulaski, Union	1
<i>Cixius basalis</i> Van Duzee	Washington	3
<i>C. coloepeum</i> Fitch	Jackson, Pope, Union, Washington	4
<i>C. pini</i> Fitch	Jackson	1
<i>C. stigmata</i> (Say)	Jackson	4
<i>Monorachis sordulentus</i> Uhler	Johnson	1
<i>Myndus fulvus</i> Osborn	Gallatin, Johnson, Pope, Pulaski	2
<i>M. pictifrons</i> Stål	Gen. dist.	4
<i>M. radialis</i> Osborn	Hardin, Johnson, Pope, Pulaski	2
<i>M. truncatus</i> Metcalf	Johnson, Massac	1
<i>Oecleus borealis</i> Van Duzee	Jackson, Johnson, Massac ^b , Washington, Wayne	4
<i>O. epetrior</i> Kramer	Johnson	4
<i>O. productus</i> Metcalf	Union, Washington	2
<i>Oliarus aridus</i> Ball	Perry, Pulaski ^c	2
<i>O. chuliotus</i> Ball	Jackson, Hardin ^c	2
<i>O. ecologus</i> Caldwell	Gen. dist.	2
<i>O. placitus</i> Van Duzee	Jackson, Union, Williamson	2
<i>O. quinquelineatus</i> (Say)	Union	2
<i>O. sablensis</i> Caldwell	Johnson, Wayne	4
<i>Pintalia dorsovittatus</i> (Van Duzee)	Gen. dist.	2
Delphacidae		
<i>Delphacodes alexanderi</i> (Metcalf)	Union	1
<i>D. andromeda</i> (Van Duzee)	Gen. dist.	2
<i>D. basivitta</i> (Van Duzee)	Hardin, Pulaski	4
<i>D. campestris</i> (Van Duzee)	Gen. dist.	4
<i>D. foveata</i> (Van Duzee)	Johnson, Union, Washington	4
<i>D. laminalis</i> (Van Duzee)	Johnson, Massac, Pope, Pulaski, Union	4
<i>D. lutulenta</i> (Van Duzee)	Gen. dist.	4
<i>D. nitens</i> Muir and Giffard	Hardin	2
<i>D. pacifica</i> (Crawford)	Jackson	1
<i>D. puella</i> (Van Duzee)	Gen. dist.	4
<i>D. sagae</i> Beamer	Hardin	2
<i>D. trimaculata</i> Beamer	Hardin	1
<i>Euides weedi</i> (Van Duzee)	Jackson	1
<i>Kelisia curvata</i> Beamer	Gallatin	1
<i>K. spinosa</i> Beamer	Pulaski	2
<i>Liburniella ornata</i> (Stål)	Gen. dist.	4
<i>Megamelus davisii</i> Van Duzee	Franklin, Jackson, Williamson	2
<i>M. palaetus</i> (Van Duzee)	Alexander, Union	1
<i>Pissonotus albovenosus</i> Osborn	Pulaski	1
<i>P. aquilonius</i> Morgan and Beamer	Johnson	1
<i>P. brunneus</i> Van Duzee	Hardin, Johnson, Massac, Pulaski, Union	4
<i>P. delicatus</i> Van Duzee	Massac, Pulaski, Union	2
<i>P. flabellatus</i> (Ball)	Gallatin, Hardin	4

Table 1. (Continued)

Taxon	Southern Illinois County Records	State Distribution ^a
<i>P. marginatus</i> Van Duzee	Johnson, Pulaski	2
<i>P. piceus</i> Van Duzee	Gen. dist.	4
<i>Stenocranus brunneus</i> Beamer	Gen. dist.	2
<i>S. delicatus</i> Beamer	Gen. dist.	4
<i>S. lautus</i> Van Duzee	Gen. dist.	4
<i>S. pallidus</i> Beamer	Pulaski	3
<i>S. similis</i> Crawford	Alexander, Johnson, Pope	4
<i>Stobaera tricarinata</i> (Say)	Gen. dist.	4
Derbidae		
<i>Amalopota fitchi</i> Van Duzee	Pulaski	1
<i>A. mcateeii</i> Dozier	Union	1
<i>A. uhleri</i> Van Duzee	Hardin, Pulaski, Saline	2
<i>Anotia bonnetii</i> Kirby	Alexander, Jackson	1
<i>A. burnetii</i> Fitch	Pulaski	2
<i>A. kirkaldyi</i> Ball	Pulaski	2
<i>Apache degeerii</i> (Kirby)	Gen. dist.	4
<i>Cedusa australis</i> (Metcalf)	Gallatin, Hardin, Pope	2
<i>C. bedusa</i> McAtee	Pulaski	1
<i>C. incisa</i> (Metcalf)	Washington	3
<i>C. kedusa</i> McAtee	Jackson, Union, Washington	4
<i>C. maculata</i> (Van Duzee)	Pulaski	2
<i>C. vulgaris</i> (Fitch)	Gallatin, Jackson, Union	4
<i>Euklastus harti</i> Metcalf	Jackson ^d , Pulaski	1
<i>Neocenchrea heidemanni</i> (Ball)	Jackson	2
<i>Otiocerus abbotii</i> Kirby	Pulaski	2
<i>O. amyotii</i> Fitch	Alexander, Washington	2
<i>O. coquebertii</i> Kirby	Jackson	4
<i>O. francilloni</i> Kirby	Jackson, Pulaski	1
<i>O. stollii</i> Kirby	Alexander, Franklin, Jackson, Pulaski	4
<i>O. wolfii</i> Kirby	Gen. dist.	4
<i>Patara vanduzeei</i> Ball	Jackson, Pope, Pulaski	2
<i>Sayiana sayi</i> (Ball)	Pulaski	2
<i>Shellenius ballii</i> (McAtee)	Johnson	1
<i>S. schellenbergii</i> (Kirby)	Jackson, Pulaski	2
<i>Syntames uhleri</i> (Ball)	Gen. dist.	2
Dictyopharidae		
<i>Nersia florens</i> Stål	Alexander, Jackson, Union	1
<i>Phylloscelis atra</i> Germar	Gen. dist.	4
<i>P. pallescens</i> Germar	Pope, Washington	3
<i>Rhynchomitra microrhina</i> (Walker)	Gen. dist.	1
<i>Scolops angustatus</i> Uhler	Jackson, Union	3
<i>S. perdis</i> Uhler	Alexander, Jackson, Pope, Pulaski, Union	1
<i>S. pungens</i> (Germar)	Gen. dist.	4
<i>S. sulcipes</i> (Say)	Gen. dist.	4

Table 1. (Continued)

Taxon	Southern Illinois County Records	State Distribution ^a
Flatidae		
<i>Anormenis septentrionalis</i> (Spinola)	Gen. dist.	4
<i>Cyarta melichari</i> Van Duzee	Monroe, Union	1
<i>Metcalfa pruinosa</i> (Say)	Gen. dist.	4
<i>Ormenoides venusta</i> (Melichar)	Gen. dist.	2
Fulgoridae		
<i>Cyrpoptus helfragei</i> Stål	Jackson, Pope	1
<i>Poblicia fuliginosa</i> (Olivier)	Pope, Union	2
Issidae		
<i>Bruchomorpha jocosa</i> Stål	Union	4
<i>B. oculata</i> Newman	Gen. dist.	4
<i>B. pallidipes</i> Stål	Jackson, Johnson	1
<i>B. tristis</i> Stål	Gen. dist.	4
<i>Thionia bullata</i> (Say)	Gen. dist.	2
<i>T. elliptica</i> (Germar)	Alexander, Jackson, Union	1
<i>T. simplex</i> (Germar)	Clinton, Jackson, Pulaski, Union	2

^aState distribution coded as follows: 1=southern Illinois only, 2=primarily southern half of state, 3=primarily northern half of state, 4=statewide distribution

^bfrom Kramer (1977).

^cfrom Mead (1968).

^dfrom Frison (1927).

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