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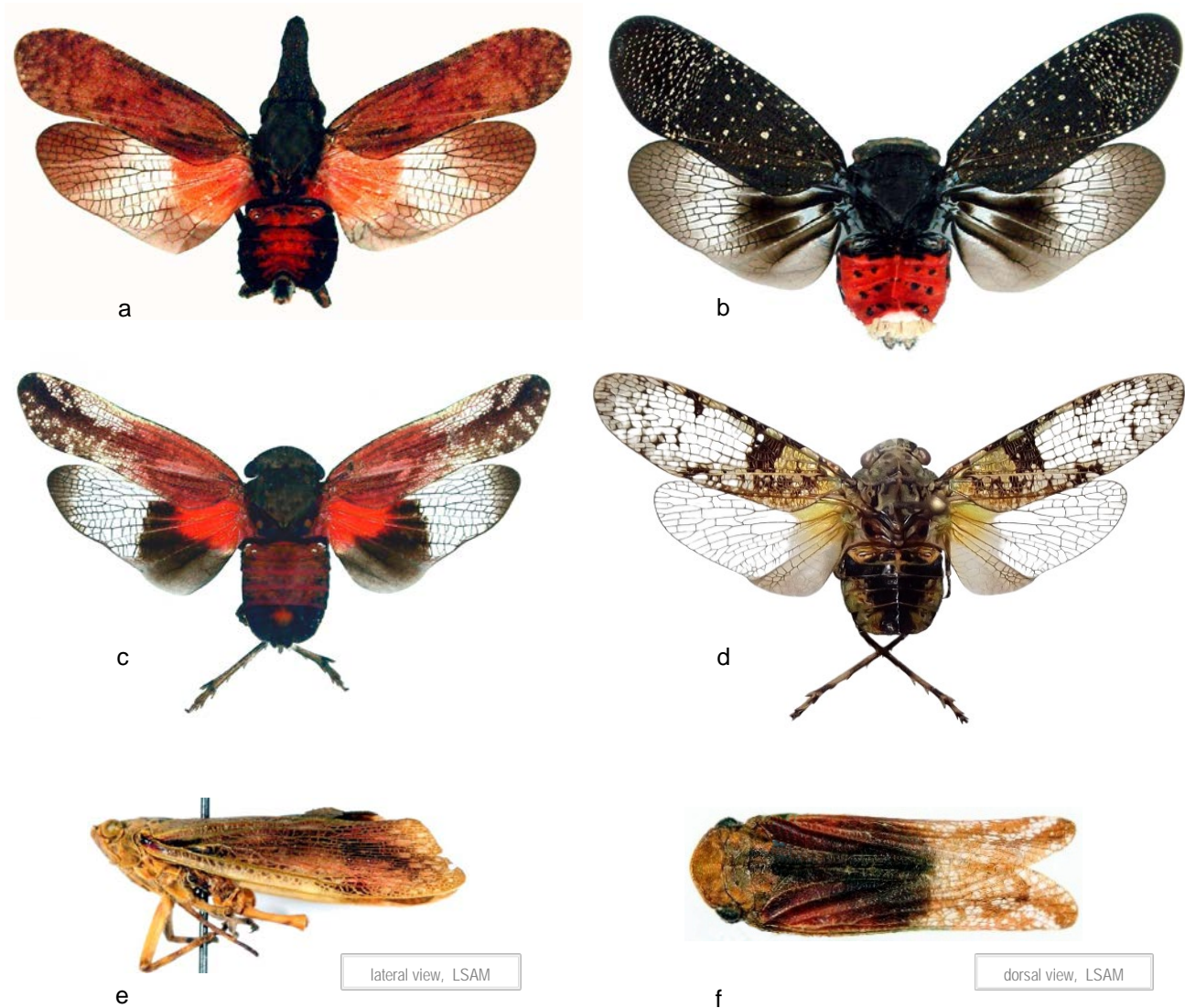
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# Fulgoridae Latreille, 1807 of Louisiana

by  
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**Fig. 1. Louisiana Fulgoridaea: a. *Amycle vernalis* Manee, Natchitoches Par., b. *Poblizia fuliginosa* (Olivier), Natchitoches Par., c. *Cyroptus belfragei* Stål, St. Tammany Par., d. *Calyptoproctus marmoratus* Spinola, St. Tammany Par., e. *Poblizia texana* Oman, Lincoln Par., f. *Cyroptus reineckeii* Van Duzee, Jefferson Par., (dorsal views, except as noted)**

Over the past 55 years of operating around 500 insect traps 24-hours daily, 365-366 days of every year of various configurations and purposes including automatic-capture, high-wattage light traps (logging ~1,400,000 light-trap hours), billions of insects were captured as bycatch. Details of this expansive research were recently synopsised (Brou and Brou, 2022). Our target study insects were lepidoptera, also pinned and labeled were hundreds of thousands of non-lepidoptera insects most often annually donated over five decades to various museums here in the US and around the world. For example, decades earlier we donated hundreds of adult *Calyptoproctus marmoratus* Spinola (Fig. 1d) to the Louisiana State Arthropod Museum. We address six species (629 adults) of Louisiana Fulgoridae (*sensu stricto*) in this publication.



Fig. 2. Adult *Amycle vernalis* captured in Louisiana. n = 6



Fig. 3. Adult *Poblicia fuliginosa* captured in Louisiana. n = 34



Fig. 4. Adult *Cyroptus belfragei* captured in Louisiana. n = 14

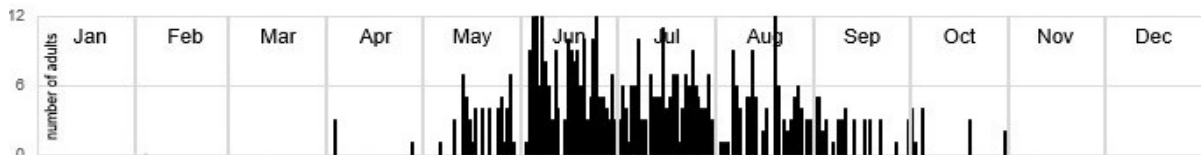


Fig. 5. Adult *Calyptoproctus marmoratus* captured in Louisiana. n = 567



Fig. 6. Adult *Poblicia texana* captured in Louisiana. n = 1



Fig. 7. Adult *Cyroptus reineckeii* captured in Louisiana. n = 7

*Amycle vernalis* Manee, 1910. (Fig. 1a) Amycle [sic] vernalis Manee, Ent. News 21: 117. This species was earlier reported to occur in 'southern states' by Metcalf (1947) and for Louisiana by Bartlett et al (2014). The small number of adults of this species in our research were all taken in automatic-capture light traps during occasional field trips over the past 50 years at Kisatchie National Forest, Natchitoches Parish (Fig. 2).

*Poblicia fuliginosa* (Olivier, 1791) (Fig. 1b) Fulgora fuliginosa Olivier, Encyclopedie Methodique 6: 574. This species was earlier reported to occur in 'southern states' by Metcalf (1947) and for Louisiana by Bartlett et al (2014). In our research, adults of this species were mostly taken by hand netting and occasionally in automatic-capture light traps during occasional field trips over the past 50 years at Kisatchie National Forest, Natchitoches Parish in the months of September and October (Fig. 3). Reported in neighboring Texas, Mississippi and other states by Dozier (1928). Attempting to capture this species using a hand net, the net wielder will soon discover this species moves as if rocket propelled.

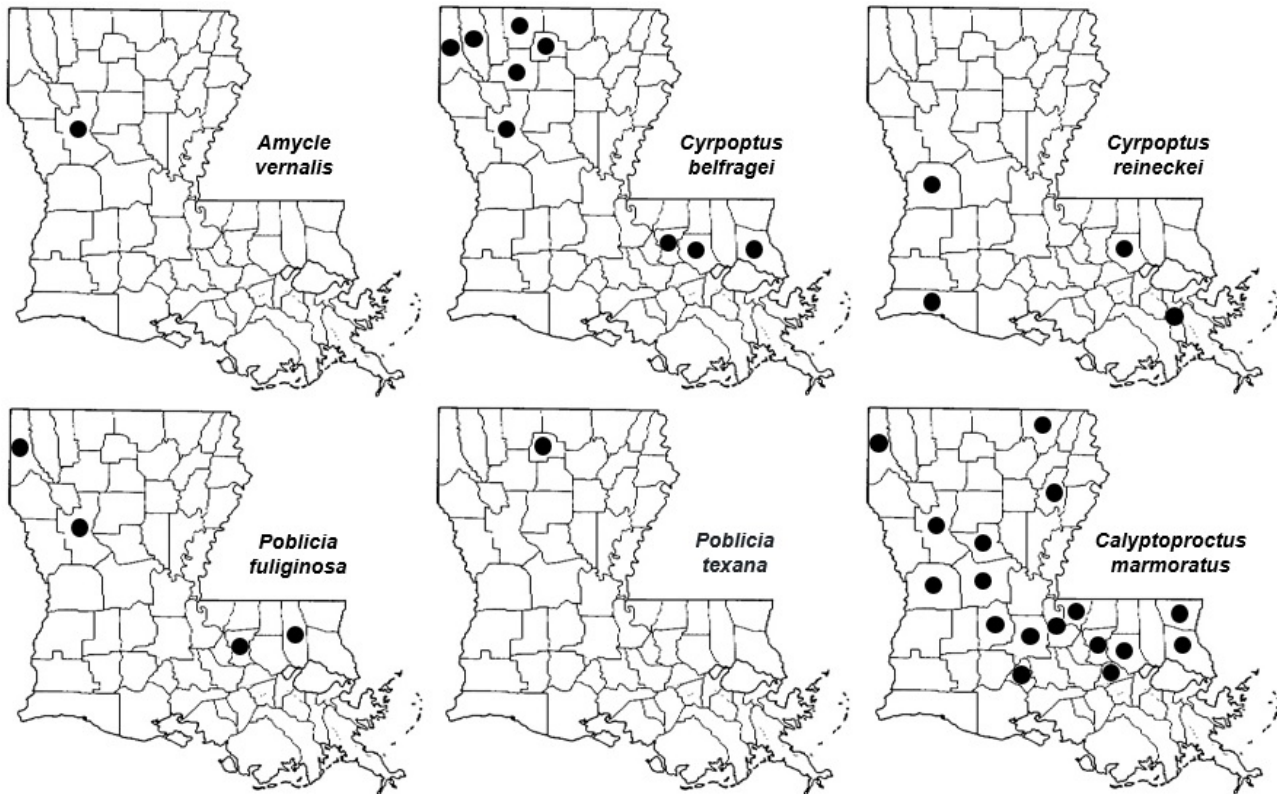
***Cyrpoptus belfragei*** Stål, 1869. (Fig. 1c) Berliner Ent. Zeit. 13: 240. This species was earlier reported to occur in 'southern states' by Metcalf (1947) and for Louisiana by Bartlett et al (2014). The small number of adults of this species were mostly taken in automatic-capture light traps operated non-stop over the past 40 years at the \*AESS (Fig. 4). Reported from neighboring Texas and other states by Dozier (1928).

***Calyptoproctus marmoratus*** Spinola, 1839 (Fig. 1d) Ann. Soc. Ent. France 8: 271. Adults of this species were mostly taken in high wattage automatic-capture light traps over the past 40 years at the \*AESS in the months early April to end of October (Fig. 5). Despite this being the most abundantly captured species by us (more than 1000 adults), apparently it was not previously reported for Louisiana. Dozier (1928) reported a single specimen from the neighboring state of Mississippi.

***Poblicia texana*** Oman (Fig. 1e) captured in Lincoln Parish, Ruston, Oct 19,1936, coll. M. Wheelis. This 88 year old specimen is in the LSAM.

***Cyrpoptus reineckei*** Van Duzee, 1909 (Fig. 1f) was earlier reported to occur in 'southern states' by Metcalf (1947: 76) and for Louisiana by Bartlett et al (2014). We did not capture this species in our Louisiana field research. But specimens do exist in Louisiana State Arthropod Museum (LSAM) for Jefferson, Cameron and Vernon Parishes (Fig. 7). Dozier (1928) reported this species only from the state of Florida.

The parish records for these Louisiana ***Fulgorid*** species are illustrated in Fig. 8.



**Fig. 8. *Fulgoridae* Louisiana parish records.**

No adults of ***Lycorma delicatula*** (White) were encountered nor are reported for Louisiana. "***Lycorma delicatula*** (White, 1845, the spotted lanternfly (SLF) is the most conspicuous addition to the planthopper fauna (viz. Barringer et al. 2015). Native to the People's Republic of China, SLF was first found in the US in Berks County, Pennsylvania, in 2014 and now has established populations in 14 states in the northeastern US and individual specimen reports in 3 additional states (as of January 2023)" (Bartlett and Wilson, 2023). The original description of ***Lycorma delicatula*** (White) is illustrated in Fig. 9.

*Aphaena delicatula*.—Hemelytra very pale greenish brown; basal part with many black spots (at least twenty), six of them on the anterior margin; the end darker brown, beautifully reticulated with pale greenish brown; wings at the base vermilion-red, with largish black spots, irregular on either side (at least seven); tip widely black; a large acutely-triangular sea-green mark on fore-edge between the red and black parts. Antennæ orange. Head and thorax above of a pale brownish colour with a kind of bloom over them. Body and legs blackish brown with a slight bloom. Expanse of hemelytra 1 inch  $7\frac{1}{2}$  lines.

*Hab.* China (Nankin); G. Tradescant Lay, Esq.

G. Tradescant Lay, Esq., in a note dated “British Consulate, Canton, 19th January, 1844,” referring to this insect, says, “The gay *Fulgoridae* were found in a grove not far from Nankin clinging to the trunk of a tree. They were however so much on the alert that it was very hard to capture them. I imagine they take their food and their pastime during the night and spend the day in sleep.” Both the above species come near the *Aphaena variegata* of Guérin-Meneville in his ‘Iconographie Règne Animal,’ t. 5 8. f. 3.

There are numerous reports of planthoppers including Fulgorids being parasitized by the tiny moth *Fulgoraecia exigua* (Hy. Edw., 1882) (Lepidoptera: Epipyropidae) (Fig. 10) of which many hundreds of adults have been taken over four decades at the \*AESS in the months of June through September in automatic-capture high-wattage mercury vapor light traps. The mention of *F. exigua* here is newly reported for the state of Louisiana. A one-year (2009) effort to collect adults of *F. exigua* using semiochemicals by the late USDA research lepidopterist Paul W. Schaefer at the abundant planthopper location \*AESS failed to capture any specimens even though ten of thousands of planthoppers were captured there before, during and after.

Fig. 9. Original 1845 description of *Lycorma* (*Aphaena*) *delicatula* (White).



Fig. 10. *Fulgoraecia exigua* (Hy. Edw) both captured at AESS, male 1999 Aug. 23, female 1989 Jun 30.

Over the past five decades the authors have permanently placed thousands of other pinned and labeled non-Fulgorid Louisiana planthoppers into the LSAM and the Florida State Collection of Arthropods (FSCA). Specimens included in this current study bearing names of collectors and or determiners include (LSAM): C.B. Barr, V.A. Brou, C.R. Bartlett, S.T. Dash, D.R. Ganaway, M. Gimmel, V.L. Moseley, L.B. O'Brien, L.D. Newsom, D. Rider, E.G. Riley, M.A. Seymour, M.S. Strother, A.T. Wier, M. Wheelis, L.E. Wisser, and L.A. Womack.

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\**Abita Entomological Study Site* (AESS): sec.24,T6S,R12E, 4.2 miles northeast of Abita Springs, St. Tammany Parish, Louisiana USA.

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