Leaves coriaceous; evergreen, hence on wood of the previous season, 135. Kalmia: not perfoliate.

135. Leaves deciduous each year. 136.

- Leaves with the two outer lateral veins more or less parallel with 136: the midrib; fruit a drupe. Cornus.
- 136. Leaves pinnately veined to the tip, the outer lateral veins usually spreading. 137.
- 137. With stipules between the large acuminate leaves. Cephalanthus.

137. Without stipules. 138.

138. Upper leaves perfoliate. Lonicera.

138. Leaves not perfoliate. 139.

- Petioles meeting around the stem or connected by a distinct ridge; 139: spreading shrubs or woody climbers. 140.
- 139. Petioles not meeting, not connected by a ridge; erect shrubs or small trees. 141.
- 140. Leaves of the ovate, oval or orbicular type, not heart-shaped at the base; stem never twining; bundle scar 1 or appearing as 1. Symphoricarpos.
- 140. Leaves of the lanceolate, ovate-lanceolate, or oblong type, often heart-shaped at the base; stems sometimes twining; bundle scars distinctly 3. Lonicera.

141. Leaves lanceolate or ovate-lanceolate, 1-3 in. long; fruit a globose berry. Ligustrum.

141. Leaves oval or oblong, narrowed at the base, 3-6 in. long, fruit an oblong drupe. Chionanthus.

Leaves ovate, or ovate-lanceolate, usually cordate or truncate at the base, 3-7 in. long; fruit a capsule. Syringa.

DESCRIPTIONS OF NEW NORTH AMERICAN FULGORIDAE.

HERBERT OSBORN.

Prokelisia, nov. gen.

Agrees with Kelisia in the narrowed elytra, aborted wings and general

facies, with Megamelus in the widening front, and keeled apex of vertex.

Vertex long narrowing anteriorly, front widening on its lower half, narrowing sharply to tip of vertex, the carinae not meeting but extending very prominently over tip and on to vertex. Clypeus somewhat tumid, median carinae somewhat obtuse, lateral carinae distinct, curved; antennae with second joint short, tuberculate. Pronotum with three prominent carinae, lateral ones straight and reaching extreme margin. Scutellum broad, disk quadrilateral with posterior margin produced into prominent obtuse point with reflected margins. Elytra long distinctly narrowed from near base to the tip; wings mere rudiments.

Prokelisia setigera, n. sp.

Light yellow or pallid, unicolorous except for row of dark punctures next lateral carinae of front, the tibial spines, teeth of spur, spines and claws of tarsi and spots on venter. Length: female 3.5 mm.; male, 3 mm.

Vertex longer than broad distinctly narrowing to apex, the carinae Front conspicuously widened at apex narrowed to tip of vertex, carinae high and extending prominently over tip of vertex; clypeus tri-angular lateral carinae curved. Pronotum wider than long carinae elevated, hind margin slightly emarginate deepest, at middle almost notched; scutellum truncate, hind lobe obtuse, margin strongly reflected. Tibial spur very large, broad, marginal teeth strong. Elytra long, narrowing to apex, veins minutely setigerous. Wings minute not reaching base of abdomen, apex obtusely angular, margins sinuate, no veins visible.

Color: straw yellow; borders of the frontal carinae with short extension upon vertex, a band at base of abdomen, a lateral basal spot on segments one to three and borders of the ovipositor, tibial spines, teeth of tibial spur, spines and claws of tarsi, black. Abdomen of male tinged with fulvus, bases of tergal segments sometimes infuscated.

Genitalia. Female plates short, rounded at apex. Male hooks.

incurved nearly touching; style, long, slender, compressed.

Described from twenty specimens, fourteen females, six males, collected at Cameron, La., by Prof. J. S. Hine in latter part of August, 1903.

This species shows some striking resemblance to Kelisia, but aside from the characters which seem to require a separate genus it has well marked characters separating it from any species in that genus.

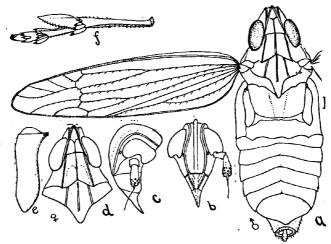


Fig. 1. Prokelisia setigera. a, male dorsal view; b, front; c, side view of head; d, dorsal view of female; e, aborted wing; f, posterior leg. From drawings by J. G. Sanders.

Megamelus angulatus n. sp.

Straw yellow, marked on apex of vertex, sides of pronotum, clavus and costa of elytra, base of abdominal segments with black; elytra very short barely covering base of abdomen. Length female, 3.5 mm.; male, 3 mm.

Vertex triangular, the anterior triangle in front of eyes, apex acute; front widening beyond the middle, broadest near base of clypeus, carinae strong; clypeus elongate, carinae prominent. Pronotum equal to vertex and scutellum in length, lateral carinae strongly divergent, reaching hind border outside of origin of lateral carinae of scutellum. Scutellum broadly triangular, apex right-angled, elytra short, veins conspicuous, especially claval and subcostal. Abdomen strongly carinate on median line.

Color, straw yellow above and below with fuscous spots within the fovae of vertex, black patches on apex of vertex on line with black eye and black lateral area of pronotum. Faint black flecks inside carinae of front. Lateral area of pronotum, basal part of lateral area of scutellum,

clavus except veins, costal space and portions of discal spaces, basal portion of abdominal segments, plates, border of ovipositor, tip of rostrum, tarsal claws, black, legs tinged with fuscous. The males similarly colored but brown or blackish markings are nearly obsolete on abdominal segments. except fourth and fifth and sides of pygofer.

Male genitalia, hooks strongly curved upward, narrowed to acute anex.

which is quite brown or black.

Specimens are in hand from Mr. A. F. Satterthwaite, Harrisburg. Pa., who collected them on Spatterdock (Nuphar sp.) at St. George's, Del.

Megamelanus spartini. n. sp.

Elongate, slender, female light straw color Male with elytra and beneath black. Length of female, 3 mm., male, 2.5 mm.

Head distinctly produced, vertex produced in front of eyes, nearly twice as long as pronotum, twice as long as greatest length of eye. Lateral margin elevated, central carinae prominent, forked anteriorly. The carinae of fork becoming obsolete near lateral margin, front elongate twice as long as wide, elliptical, central carinae prominent, lateral carinae evenly curved from base to clypeus. Clypeus elongate, triangular, median carinae obsolete, antennae minute, pronotum slightly wider than head, carinae slightly divergent, elytra narrow, nearly parallel veins prominent. minutely setigerous.

Color of female stramineus, unicolorous, male with vertex, upper part of front, eyes, side of head, pronotum, scutellum, and hind tarsi stram-

ineus, otherwise pitch black.

Genitalia—female, plates elongate, male, pygofer obliquely emarginate. Hooks divergent, narrowing to apex.

A number of specimens of this minute species were taken by beating the heads of a rank beach grass (Spartina patens) on the shore of Oyster Bay and Cold Spring Harbor, Aug. 18 and 19, 1904, and two females and fifteen males collected by Mr. J. S.

Hine, Bay Ridge, Aug. 7, 1899.

I found my specimens only by beating the blossoms and the females especially bear a striking resemblance to the anthers of the blossom of this grass so it would seem that they get a very distinct protection from their size and appearance. When beaten into the net with the abundant chaff from the blossoms they were very difficult to recognize until they began to move. The colors of the male do not seem to be so distinctly correlated with their habitat. The species is apparently pretty closely related to elongatus Ball described from Florida and I suspect that species will prove to have a similar habitat. Elongatus was taken in abundance at New Orleans, La., in March, by Prof. Hine which would indicate that it hibernates as adult.

Stobaera rallida n. sp.

Superficially resembles tricarinata Say but has lighter vertex, front and pronotum much broader, sides of front not parallel, antennae flattened and elytra pictured, veins ivory white, pustulate, setae very minute or wanting. Length female, 4.5 mm.; male, 4 mm.

Head wider than pronotum, vertex nearly twice as wide as long, lateral carinae slightly divergent, disc deeply impressed each side of central carina, central fovea small but deep, anterior margin straight, front broad,

widest at lower margin of eye. Subangulate, converging to clypeus, central carina elevated, forked close to the base, lateral carina prominent directed outward, clypeus long, tricarinate, antennae very broad, flattened, apical portion of second joint pustulate, pronotum broad, lateral carinae very widely separated passing from posterior angle of eye to hind border, scutellum broad, disc depressed, carinae elevated, elytra vitreous, apical nervures forked near apex, pustules with very minute setae where visible.

Color, light straw yellow, front slightly darker with broken, transverse, creamy white bars, all carinae light yellow or creamy, scutellum light yellow at apex, elytra vitreous, somewhat infuscated, nervures ivory white with minute dark pustules. Apex broadly infuscated and clavus at base and apex blackish, transverse bands back of clavus infuscated, all colors

darker in male, beneath pallid, spines and tarsal claws, black.

Genitalia—Female pygofers long, carinate on middle; anal style flattened, lanceolate. Male pygofer, truncate, slightly produced medially, hooks erect strongly curved at apex.

Numerous specimens of this rather striking species were collected on a shrub, Baccharis halimifolia, near Oyster Bay, Aug. 19, 1904, and I have in hand also several specimens collected by Prof. J. S. Hine at Bay Ridge, M. D. Superficially this recalls tricarinata, but the more pallid color is apparently constant and the structural characters of the head separate it distinctly. In frontal carinae it would seem hardly to fit genus Stobaera but the pronotal character agrees so well for that genus that it seems best to place it here, provisionally, at least.

Stobaera minuta. n. sp.

Similar to tricarinata Say but very much smaller, front dusky between eves only, setae of elytra minute or wanting, apical cloud not so much broken. Length of female, 3 mm., male 2.5 mm. to tip of elytra.

Vertex nearly quadrate, fovae rather shallow, anterior one minute, front with sides parallel, pronotum shorter than vertex, hind margin concave scarcely angled at centre. Scutellum with carinae weak, elytral

nervures, pustulate but not setigerous.

Color—Vertex yellowish brown, face between eyes brown, sharply separated from yellow lower portion. Antennae brown, slightly darker than upper part of front, pronotum yellowish brown, a dark spot behind eye, scutellum fulvous yellow or shaded brown usually darker on anterior part and some specimens with dark brown on lateral portion. Elytra milky white, veins interrupted with black points corresponding with the pustules, with oblique row of dark spots lying in the discal cells. The smaller posterior one within the fork of the second sector, the dark cloud occupying about one half of the apical cells, including most of the central cell. Beneath light yellow or whitish with dark points on pleurae and black points on the legs, claws black.

Genitalia—Female pygofer narrow behind, plates narrow, ovipositor reaching to their tip, anal style short, whitish. Male—pygofer truncate, aperture narrowing ventrally and slightly concavely excavated. Hooks

short, bluntly curved, blackish.

Described from a large series of specimens including twentyone females and three males, collected by Prof. J. S. Hine at Cameron, La., Aug., 1903. Except for certain details of structure and difference of distribution of color this species might be taken for a miniature form of tricarinata but length of pronotum, color of face, extent of elvtral clouds and genitalia present very obvious differences which readily separate it.