A NEW METROBATES FROM FLORIDA
(Hemiptera, Gerridae)

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Metrobates anomalus, n. sp.

Size.—♂ 4.1 x 1.7 mm., ♀ 4.3 x 2.3 mm.; the widths measured across the mesothoracic acetabula. Alate form unknown.

Color.—Velvety black, the dorsum with very short appressed grayish pile, much more sparse on a broad median vitta of mesonotum and anterior lobe of metanotum; pronotum with the depressed orbicular median area ivory white (rarely with only a small yellow spot); head with an oblique dark rust-colored spot each side on vertex; sub-basal band on first antennal segment yellow or white; abdominal tergites each with a basal transverse wedge-shaped whitish area reaching each lateral margin, and in females also with a median quadrangular whitish area, not reaching the apical margin and obsolete on the apical segments. Beneath plumbeous, with the gula, anterior acetabula and ventral portion of middle acetabula ivory white; anterior trochanters honey yellow; anterior coxae and rostrum piceous, both provided with long yellow pile below; ventral abdominal segments narrowly margined with very short golden pile, sometimes obscured by blackening of the segmental margins; apical ventral segment and the genital segments (♂) sericeous golden pilose.

Structure.—Pronotum transverse, 2½ times as wide as long, its anterior margin sinuate in both sexes, the posterior margin sinuate in the male but nearly straight in the female; posterior margin of mesonotum broadly and shallowly sinuate in the male, less distinctly so in the female but with a most obsolete median notch; metanotum divided into two approximately equal parts (♀) by a very faint transverse curved suture ending in a deep impression at each side, this suture obsolete at middle in the male but the posterior lobe (♂) slightly depressed below the anterior one. Mesonotum with a faint median longitudinal suture; mesosternum likewise longitudinally sutured but this suture not percurrent at either end. Posterior margin of mesosternum distinctly sinuate. Female genital segments not withdrawn into venter. Connexivum of female flattened, mis-shaped in both specimens at hand, the inner margins parallel or nearly so; male connexivum rather strongly reflexed on basal segments, becoming oblique at the middle and nearly horizontal toward the apex. First tarsal segment of fore legs in both sexes with a comb of about eight setae, the proximal ones longest, the distal ones shortest.

Male.—Antennal segments I-IV as 60:26:17:18; first segment gradually thickened on basal half, becoming about twice as thick as second segment, very short pilose below throughout its length and with its middle portion fringed with much longer hairs, much as in M. hesperius but this antennal comb less dense than in that species; second and third segments lightly curved and with the usual pairs of subapical combs found in this genus. Fore femora slightly incassate and lightly sinuate; tibiae

1 Contribution from the Biology Department of Florida Southern College.
slightly curved, with a strong blunt pre-apical spur on the inner side; ratios of femur to tibia to tarsal segments I and II as 60:45:6:18.

**Female.**—Antennal segments simple, their lengths as 48:24:15:19; basal segment with only one or two long hairs on under side. Fore legs much as in the male, the femora a little less curved and the tibia without pre-apical spur.

I collected fifteen males and two females of this species July 11, 1948, in mid-stream on slow-flowing stretches of the Peace River shortly below its source at Kissengen Springs, near Bartow, Polk County, Florida. Following the heavy rains of mid-July, this stream overflowed broadly into the woodland at either side, and the current became imperceptible. No *Gerridae* of this species were found here on July 24, when I next visited this spot, nor were any seen on subsequent visits up to October 28. The holotype, allotype and paratypes are in my collection. A paratype is also in the Kansas University collection.

This is the only species of Metrobates that I know of whose male has the first antennal segment not longer than the apical three segments combined. The antennal structure of the female is much the same as in *M. hesperius*, as the first segment in both species is about one-sixth shorter than the other segments conjoined and these last do not show any significant differences in length either relatively or absolutely. The females of the two species differ markedly, however, in their coloration, and in *M. hesperius* the anterior lobe of the female metanotum is shorter than the posterior one, while in *M. anomalus* the two lobes are subequal or the anterior is very slightly longer than the posterior. In the female of *M. anomalus* the posterior margin of the metanotum is straight, while in *M. hesperius* it is lightly but distinctly sinuate. The dorso-ventral depth of the mesothorax is about the same in both species, being slightly less than the length of the fore femur in the female, and about one-fourth less in the male.

In Anderson's key to Metrobates (Kans. Univ. Sci. Bull. 20: 302, 1932) this species runs to *M. tumidus*, but in *tumidus* the coloration of the mesonotum is different, the appendages are described as having yellow and orange markings, and the first antennal segment in both sexes is longer than the other three conjoined.