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Revision and reclassification of *Lasioglossum (Evylaeus)*, *L. (Hemihalictus)* and *L. (Sphecodogastra)* in eastern North America (Hymenoptera: Apoidea: Halictidae)

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ABSTRACT

The black species of weak-veined *Lasioglossum* (or *Hemihalictus* series) in eastern North America are revised to clarify their taxonomy and nomenclature and to facilitate identification. A subgeneric classification based upon available phylogenetic data is applied. *Lasioglossum (Sphecodogastra)* is applied more broadly than any previous usage to include many species typically classified as *L. (Evylaeus)*. The subgenus *L. (Evylaeus)* is retained but applied narrowly in agreement with phylogenetic results. *Lasioglossum (Hemihalictus)* has historically been considered monotypic but is here applied to many species of *L. (Dialictus) sensu lato* (equivalent to the carinaless *L. (Evylaeus)* of some authors). Usage of *L. (Dialictus)* is restricted primarily to species with metallic integument. Additional subgeneric synonymies for extralimital taxa are formalized and discussed. Descriptions are provided for each species with a synonymic list, diagnosis, and notes on taxonomy and biology. The recently revised Onagraceae-specialist species of *L. (Sphecodogastra)* are given abbreviated treatments. Notes on available DNA barcode data are given, with diagnostic characters supplied for closely related species. One new species is described: *L. (Sphecodogastra) seillean* Gibbs and Packer and the males of *L. fedorense* (Crawford) and *L. pectinatum* (Robertson) are described for the first time. The following three new synonymies are proposed: *Lasioglossum (Hemihalictus) sopinci* (Crawford), senior subjective synonym of *Evylaeus bradleyi* Mitchell; *Lasioglossum (Hemihalictus) macoupinense* (Robertson), senior subjective synonym of *Halictus divergens* Lovell; and *Lasioglossum (Hemihalictus) inconditum* (Cockerell), senior subjective synonym of *Halictus tracyi* Cockerell. *Lasioglossum inconditum* is here considered to be distinct from the Palaearctic species *L. rufitarse* (Zetterstedt). A lectotype is designated for *Halictus quebecensis* Crawford. We present the first record of *L. lustrans* (Cockerell) and *L. swenki* (Crawford) in Canada and the first record of *L. lusorium* (Cresson) east of the Mississippi River. Updated keys to species are provided for the fauna of eastern North America.

Key words: sweat bees, taxonomy, new species, DNA barcoding, classification, phylogenetic systematics, *Dialictus*, *Halictini*