



For the first time all known New World members of the cosmopolitan genus *Euplectrus* Westwood, 1832 (Eulophidae) are treated comprehensively. This monograph includes 90 *Euplectrus* species, of which 55 are described as new. All new species are from Area de Conservación Guanacaste in northwestern Costa Rica, an area that is also the type locality of 20 of the previously described species. Species delimitations are hypothesized using a combination of data from biology, morphology and the DNA barcode (COI), i.e. with an integrative approach. The species are described or re-described, diagnosed and uniformly illustrated in colour and SEM micrographs in grey-scale. To facilitate the identification two keys are provided, one for females and one for males. To stabilize the nomenclature, lectotypes are designated for eight previously described species. Hosts are known for 74 of the species and all known *Euplectrus* larvae are gregarious ectoparasitoids mainly on naked caterpillars from nine Lepidoptera families. The species are very host specific, usually targeting one species, or two or more closely related species feeding on a narrow range of host plants. Larvae of *Euplectrus* species are unique among the Chalcidoidea in being able to spin cocoons, which are illustrated with several colour photos of their biology.

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INTEGRATIVE TAXONOMY OF NEW WORLD *EUPLECTRUS* WESTWOOD (HYMENOPTERA, EULOPHIDAE), WITH FOCUS ON 55 NEW SPECIES FROM AREA DE CONSERVACIÓN GUANACASTE, NORTHWESTERN COSTA RICA
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Euplectrus magdae Schauff, 2001

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