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FUNCTIONAL MONOGYNY, SEXUAL BEHAVIOR, AND  
KARYOTYPE OF THE GUEST ANT,  
*LEPTOTHORAX PROVANCHERI* EMERY  
(HYMENOPTERA, FORMICIDAE)

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## 1) INTRODUCTION

The ant species *Leptothorax provancheri* was first detected by Provancher (1881, 1883) near the actual Québec metropolitan region, in the locality of Cap-Rouge, Comté de Québec, and described under the name *Myrmica tuberculum* Fabricius. Emery (1895) recognized it as a new species to which he gave the present name. Following Creighton (1950), *L. emersoni* Wheeler (1901) and *L. emersoni hirtipilis* Wheeler (1917) are synonyms of *L. provancheri*. Thus the range of this species extends from eastern Canada and New England west to Alberta, and, with the subspecies *L. provancheri glacialis* Wheeler (1907), south to Colorado and northern New Mexico (Gregg, 1963). The subspecies *glacialis* is not recognized by other American myrmecologists. There is no sound basis to retain it at this moment. In the Catalog of Hymenoptera North of Mexico (U.S.N.M.), D.R. Smith did not retain it (1979). *L. provancheri* is allied to the subgenus *Mychothorax* Ruzsky, or *Leptothorax* sensu Smith (1950). Biological observations were made by Wheeler (1901, 1903, 1910). From these it is known that *L. provancheri* (= *emersoni*) and its subspecies all are living together with host ants of the genus *Myrmica*, in a manner which resembles most the relations of *Formicoxenus* to its *Formica* hosts (xenobiosis). This means that *L. provancheri* constructs small nests in the earthen walls of the

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