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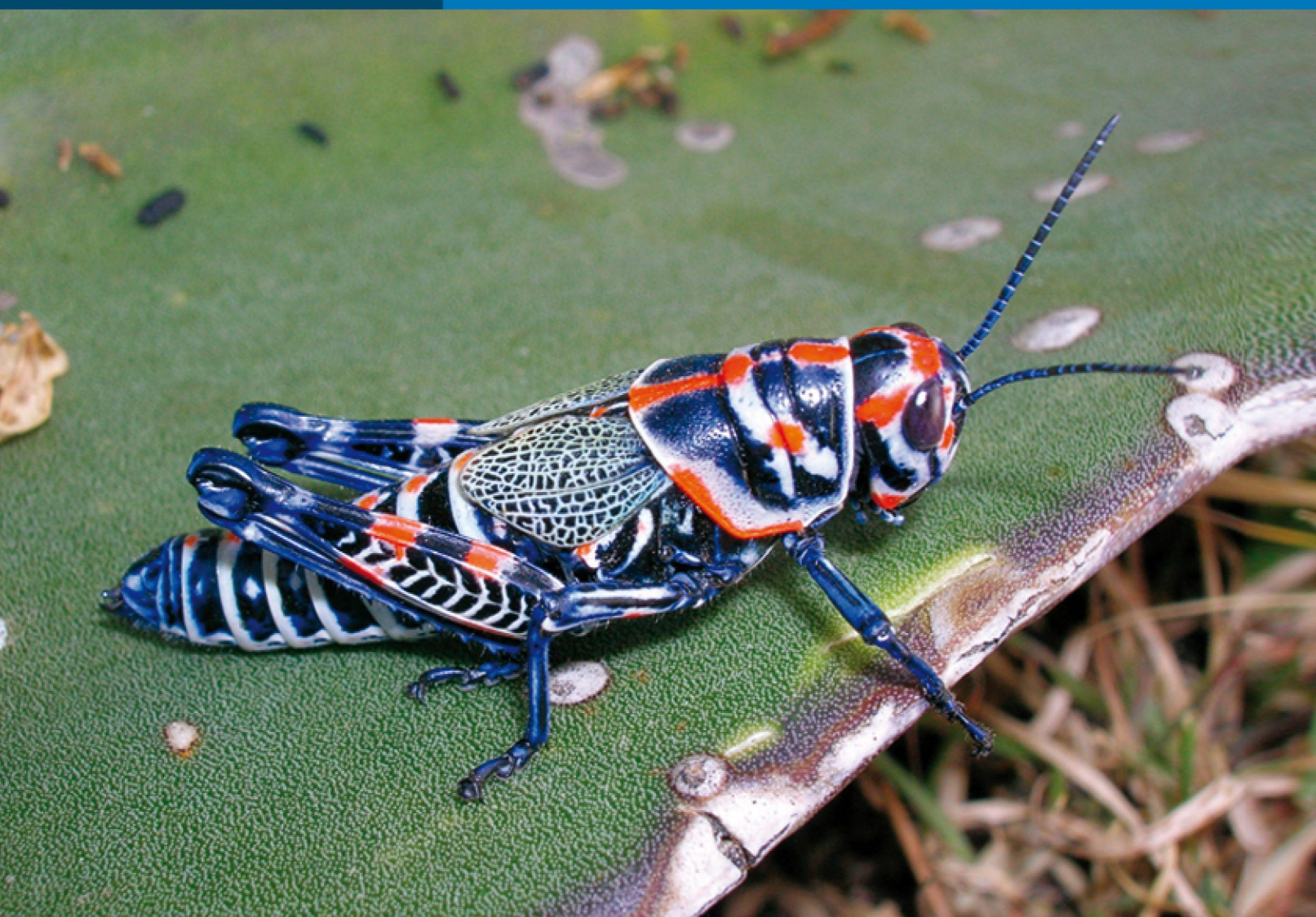
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FOR NATURALISTIC RESEARCH
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Dactylotum bicolor bicolor Charpentier, 1843 - Mexico



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Cover: Adult male of *Dactylotum bicolor* on an *Agave* sp. leaf. Mexico, Hidalgo, Tecamatlán, 2205 m, 27 XII 2010. 1) Adult male of *Melanoplus solitarius*: Mexico, Queretaro, Sierra Gorda, carr. 120, km 131, 8 km S of Pinal de Amoles, 2624 m, 24.XI.2008. 2) Mating *Cephalotettix pilosus*: Mexico, Veracruz, Reserva Natural Barranca el Corazon (Fortin de las Flores) 810 m, 6.XII.2010, (photos by Paolo Fontana).

MEXICAN MELANOPLINAE. Mexico is an extraordinary country with unique history, culture and nature. In terms of natural history this country, which has an almost continental extension (1,972,550 km²), has a huge biodiversity. The fauna and flora of Mexico are made up of both Nearctic and Neotropical elements, with many endemic taxa. Nearctic taxa decrease southwards while, at the opposite, neotropical ones increase getting to central America. Mexican diversity is really huge in all organisms, from plants, to mammals but insects are so particularly abundant, diverse and peculiar. Orthoptera are very common insects in Mexico and they are represented by almost one thousand species. Orthoptera in Mexican culture are often considered as food, especially in some states like Oaxaca, where they are normally consumed. The species used as food are members of the genus *Sphenarium* (Pyrgomorphidae), the so called Chapulines. One of the most interesting and well distributed group is that of the Melanoplinae, a subfamily of grasshoppers (Caelifera), family Acrididae. The type genus *Melanoplus* contains many species common in North America toward central Mexico with one holarctic species, *Melanoplus frigidus* (Boheman, 1846). The subfamily Melanoplinae, called sometime “spur-throated grasshoppers”, is widespread, occurring for example almost anywhere in the holarctic region. Some Melanoplinae (especially within the genus *Melanoplus*), are considered pest, although they have not a really locust behavior. Mexican Melanoplinae are represented by many species of the genus *Melanoplus*: many are distributed from USA to Mexico but a great number are endemic. Most of the Mexican endemic *Melanoplus* are short-winged to brachypterous as well as other Mexican Melanoplinae, more or less brachypterous to apterous. *Dactylotum bicolor bicolor* Charpentier, 1843 (called the Painted Grasshopper) is a common but astonishing species living in dry habitats in northern Mexico. It is characterized by bright colors, constant within local populations but also quite variable in distinct population also from closed localities. The meaning of this bright colour is not yet known but commonly this species is not considered toxic. In this case its colour pattern could be considered a Batesian mimicry. Since 2004 I had the chance to organize many entomological expeditions all around Mexico, with Italian and Mexican colleagues. During these trips we collected, photographed and bioacoustically recorded many species. An aspect of Mexican entomofauna we soon understood is the abundance of undescribed taxa. In the last years many new species and even genera have been collected and described and many of them were Melanoplinae. Is the case of *Melanoplus solitarius* (Buzzetti, Barrientos-Lozano & Fontana, 2010), collected on Sierra Gorda (Queretaro) in 2007 or of the recently collected new species of the genus *Pedies*, from Puebla. Most of these new taxa have a distribution restricted to mountains, but also tropical forests are extremely rich in Melanoplinae, with many peculiar species like *Cephalotettix pilosus* (Stål, 1878), a quite rare but locally abundant species.

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