Title:	Examining male calling bahavior and female phonotaxis behavior in the field cricket, velarifictorus
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Abstract:	Crickets are one of the most commonly used model organisms to study acoustic communication because of the simplicity and stereotypy of the call structure and the widespread presence of the sound-producing mechanism and hearing system among the Orthopterans. Crickets produce three types of calls in the context of mating: Long Distance Mating Call (LDMC), Courtship Call (CC), and Post-Copulatory Call (PCC). LDMC is a public signal to attract females over meters; they are highly stereotypical to other calls. Females use the highly conserved part of LDMC to identify conspecific males. The female response towards LDMC has been used for species identification and other methods like genitallic dissections. LDMC in some cricket species changes with age, and some of the changes make females more attracted to the individual. The field caught Velarifictorus sp. males were used to study its calling behaviour and determine the conserved aspects of LDMC. It was found that chirp duration, syllable period, peak frequency, and no. of syllables per chirp were highly conserved in the LDMC. The field caught females of Velarifictorus sp. were used to study their phonotaxis behaviour. The female response to call was studied to verify their species identity. It was found that females did not respond significantly to the LDMC of males to recognize conspecific females reliably. The relationship of Velarifictorus sp. male LDMC with age was also studied. All the call parameters showed some significant change with age, but whether it increased or decreased with age depended upon the individual. This might be due to the different age groups of individuals.
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