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Title:	Examining the ontogeny of the long- distance mating call (LDMC) in the field cricket, <i>Acanthogryllus asiaticus</i>
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Abstract:	<p>Nicolaas Tinbergen formulated four different types of questions in ethology. The questions categories are function, evolution, development, and causation of behaviour. Development or ontogeny deals with how a behaviour develops during the lifetime of the individual. Animal communication is the transfer of information from one or a group of animals through different modalities like visual, chemical, tactile, and auditory. Signals are the basic unit of communication. Acoustic signals are widely used for long-distance communication. In the communication system, Content-based signals have been evolved due to the information content they provide to the receiver. These signals function to convey multiple messages, each providing different information types. For example, some signals or signal components provide multiple information like the location, life stage, health of the signaller, etc. The mating signal is the type of content signal that is thought to convey information about a male's quality or condition. Crickets are the nocturnal members of the orthopteran family. They are a good model system to study all Tinbergen's four questions in relation to acoustic communication. Male field crickets signal acoustically to attract their potential mating partners. And females use male signals to assess their age and quality. Some male crickets provide cues about the male age while others do not. Crickets produce sound by stridulating their wings, and different types of calls are produced for different behavioral contexts. In this thesis I have examined the ontogeny of the Long-Distance mating call in the field cricket, <i>Acanthogryllus asiaticus</i>. Results of this study indicate that the temporal features of the <i>A. asiaticus</i> change as the cricket ages. Whereas the peak frequency remains more or less consistent with age. During the third week of cricket's adulthood, they called faster, and around the fifth week that had the longest call duration. Thus, 3-5 weeks' period may be inferred as this specie's reproductive peak.</p>
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