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The First Inventory of Katydids on the Osa Peninsula, Costa Rica

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Poster Presentation Abstract:

This study was undertaken to create the first inventory of katydids (Tettigoniidae) on the Osa peninsula, Costa Rica during the dry season. In addition to creating this first inventory we also collected data on environmental factors in order to allow for future comparison regarding patterns in katydid populations. We were able to sample 207 katydids using three different sampling methods and recording: time, temperature, humidity, GPS location, sex, and subfamily for each katydid found. We sampled three forest types: old growth, secondary, and riparian each three times. We organized each katydid with the help of our identification material first by subfamily and then by morphospecies using the photos we took of their distinguishing features. From this study we were able to come to the conclusion that our point sampling at night along a 200 meter transect was the most successful, as we collected data on 155 katydids using this method. We determined by our results that the subfamily Pseudophyllinae was the most abundant. Our inventory indicated that even during the dry season on the Osa peninsula it still showed a high diversity and evenness for these katydids based on our rank abundance graph. We have determined that this makes Osa peninsula an ideal location for sampling these insects, as there was such a healthy and stable katydid population.

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