Mogia, Martin, Mark Andreas, Jiri Hulcr, and Gregory P. Setliff. **Host specificity of bark beetles *(Curculionidae: Scolytinae & Platypodinae)* in lowland rainforests of Papua New Guinea.** All: Parataxonomist Training Center, PO Box 604, Nagada, Madang Province, Papua New Guinea. Email: binatangi@datec.com.pg
Session #12

There is little information available on community structure and host specificity of tropical bark beetles, and no comprehensive study including both closely and distantly related hosts from various plant lineages exists from the tropics. For our study, more than 1,300 Bark beetles from 72 species were reared from timber samples of eight tree species from primary and secondary forest in Madang Province. The target trees included two congeners and one related genus from Moraceae (closely related) and five other trees from the more distantly related Sterculiaceae, Lauraceae, Apocynaceae, Myristicace, and Sapotaceae.

We observed a strong dominance in species abundance, characterized by a small number of dominant species with the majority of other species rare or as singletons. While 43% of all species in the sample were represented by five or fewer specimens, the most abundant species was represented by over 260 specimens. Most of the bark beetle species were reared from only one or two hosts and only one species was recorded from all eight target trees. Special attention was given to which parts of the tree were being utilized by the beetles. The community was found to be segregated over the tree with over half of the species specializing in only one particular tree part (*i.e.* trunk, branches, twigs, and roots). Again, only one species was shown to attack all four parts of the tree. The trunk was found to support the most species and the roots, with only four species, supported the least.

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