2008). This study summarizes the current state of dacetine taxonomy in Guyana and describes several new species. While Guyana certainly contains many more dacetine species, both described and undescribed, we believe it is important to begin the process of documenting Guyanese dacetine diversity because (i) this information will facilitate the sorting and identification of material generated by ongoing ant surveys in Guyana, as well as in French Guiana, Suriname, and eastern Venezuela (Appendix 3); (ii) this information, combined with the information generated by those ongoing studies, will provide data urgently required by conservation efforts underway in Guyana and Suriname (LaPolla et al. 2007; Sosa-Calvo 2007; Alonso and Mol 2007; Alonso et al. 2008); and (iii) this information can be incorporated into ongoing studies aimed at understanding biodiversity patterns of the Guiana Shield, especially those generated by the Smithsonian's Biodiversity of the Guianas Program (Funk et al. 2002; Funk and Richardson 2002). This study increases our knowledge of the species that occur in Guyana and complements publications on other genera including *Acropyga* Roger (LaPolla 2004), *Lachnomyrmex* Wheeler (Feitosa and Brandão 2008), *Pheidole* Westwood (LaPolla and Cover 2005), and *Rogeria* Emery (LaPolla and Sosa-Calvo 2006).

MATERIAL AND METHODS

Specimens were examined and measured to the nearest 0.001 mm at various magnifications using a Leica MZ125 light stereomicroscope. All measurements are in millimeters unless noted otherwise. Specimens were photographed using a JVC KY-F70B video camera mounted on a Leica M420 stereomicroscope attached to an IBM Intellistation M Pro computer on which composite images were assembled using Auto- Montage Pro Version 5.03.0018 BETA software® (Synoptics Ltd.). Images were cropped and enhanced using Photoshop CS2 Version 9® (Adobe Inc.). Scanning electron micrographs (SEM) of uncoated specimens (*P. dahlanae*, *P. mariae*, and *S. royi*) were taken using a Philips XL-30 ESEM with Lanthanum Hexaboride (LaB6) source and a backscatter detector. *Strumigenys acarai* and *S. waiwai* were sputter-coated with 60:40 wt% Gold:Palladium alloy on a Cressington Scientific 108 auto/SE sputter coater to a thickness of 25-20 nm. Scanning electron micrographs for these specimens were taken using an Amray 1810 SEM with LaB6 source. Terminology for morphological features and surface sculpture, as well as abbreviations, follow Bolton (1994, 2000) and Harris (1979) with modifications where noted. Anatomical abbreviations are as follows:

EL — Eye Length: Maximum diameter of compound eye in lateral view.

GL — Gaster Length: Length of gaster in lateral view from anterior-most point of first gastral segment (third abdominal segment) to posterior-most point, excluding sting apparatus if protruding.

HL — Head Length: Length of head in full-face (dorsal) view, including occipital lobes and anterior clypeal margin but excluding mandibles.

HW — Head Width: Maximum measurable width of head in full-face view, excluding eyes.

ML — Mandible Length: Exposed length of closed mandibles, in full-face view, from anterior clypeal margin to apex of mandibles.

PL — Petiole Length: Straight line from posterior-most margin of petiole to posterior-most margin of metapleural lobe in lateral view.

PPL — Postpetiole Length: Maximum length of postpetiole in lateral view.