

FIFTY NEW TAXA DESCRIBED IN SCHISMATOGLOTTIDEAE SINCE 2011

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A new genus, *Schottarum* Boyce & Wong was described in 2014. *Schottarum* is endemic to the Kanowit-Song-Ai drainages, Sarawak, and probably beyond to the Bentuang Karimum National Park in Kalimantan. The generic name honours the Austrian botanist and plantsman Heinrich Wilhelm Schott (1794–1865), one of the founding fathers of Araceae systematics, the first monographer of the family, and the first botanist to make careful comparative studies of aroid inflorescences, flowers and fruits, through which he created the basis of Araceae taxonomy for succeeding generations. In addition to this, ca. 50 novel species were described for the tribe Schismatoglottideae from 2011 to 2014. Amongst these novelties, 19 new species of *Bucephalandra* Schott were described with these changes taking *Bucephalandra* to 27 species. For the genus *Aridarum*, the recognition of 11 new taxa has increased the number of described species to 21. *Aridarum montanum* Ridl., the type species of the genus, had not been recollected since Cecil Joslin Brooks gathered a single specimen, purportedly on Gunung Santubong in 1909, has been refound on exposed shales in Sri Aman Division, and Sarikei Division, Sarawak. The most recent review of *Piptospatha* recognized 14 species, including four additional species described from Borneo since 2012. This included recollection of the type species, *Piptospatha insignis* N.E.Br., which was first gathered from an unspecified locality by Burbidge, for the first time since 1877.

We estimate that there are at least 350 more new species to be formally described in the next 10 years.

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The enigmatic *Aridarum montanum* Ridl. on a shale waterfall. Picture courtesy of Mike Lo.

A STUDY OF BACTERIAL SPECIES FROM WILDLIFE AND ENVIRONMENTAL SAMPLES FROM SELECTED NATIONAL PARKS IN SARAWAK, MALAYSIA

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Wildlife species are known reservoirs of potentially pathogenic microorganisms. Some of these pathogens may cause contagious diseases due to the potentiality of transmission from one person or species to another. Due to the presence of these potential threats, it is important to determine the presence of these pathogens in the environment. This study discusses the occurrence of three commonly found pathogens (*Salmonella typhimurium*, *Listeria monocytogenes* and *Escherichia coli* O157: H7) in wildlife species and environmental samples (soil and water) from three selected national parks in Sarawak, Malaysia. The samples were enriched in various enrichment media specific to the microorganisms, followed by isolation on selective media. Polymerase chain reaction (PCR) targetting species virulence genes (*S. typhimurium*-*fliC* gene, *L. monocytogenes*-*hlyA* gene and *E. coli*-four shiga toxin genes) were then performed to confirm the results. Representative isolates were subjected to antimicrobial susceptibility test. Overall, *S. typhimurium*, *L. monocytogenes* and *E. coli* O157: H7 were detected from all three national parks but with low occurrence, while the results from the antimicrobial susceptibility test showed that some isolates had higher ability to resist multiple antibiotics. Thus, the data collected through this study can serve as vital information in performing microbiological risk assessment on zoonotic pathogens in Sarawak, Malaysia. This study could also provide the baseline data for future epidemiological surveillance and preventive medicine studies.

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