

Porcupine burrow distribution in relation to soil types in Sarawak, Malaysia

ABSTRACT

Although porcupines are reported to be relatively widespread in forests and cultivated areas in Malaysia, there is no published information on their roost site preferences. The objective of this study was to determine if porcupines (*Hystrix brachyura* and *Hystrix crassispinis*) select particular soil types in which to construct burrows in Sarawak. Seven porcupine burrow locations in the Bintulu-Miri area of Sarawak with a total of 30 burrow holes were located. The burrow locations were marked using the Global Positioning System and overlaid with maps of the soil series in Sarawak to determine the relationship between the burrow location, soil type and soil series. The porcupines were found to inhabit areas where the soils were from the Merit/Bekenu soil series. Merit soil series show an increased clay content with moderate to well drained soil, while the Bekenu soil series is defined as well drained with good permeability. The results suggest that the porcupines prefer soils that are relatively easy to excavate but at the same time provide burrow stability. This suggests that the soil profile of the landscape can be used to predict the probability of the presence of porcupines in the area.

Keyword: Porcupines; Burrow distribution; Soil types; Sarawak