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Nasutitermes corniger (Motschulsky) is very widespread in the Neotropics, including the West Indies (Constantino 2009; Scheffrahn *et al.* 1994), where its distinctive brown, dimpled nests are a conspicuous landscape feature. Its covered galleries, 8-10mm wide, are readily seen running up tree trunks and along major branches. On the continent and continental islands, the nests are usually above ground on trees, whilst in the Lesser Antilles they are usually at the bases of trees (C.K. Starr and I. Karsái unpubl.). Where colony foundation has been studied, colonies are characteristically initiated at ground level and may later move to a higher level (T. Hartke pers. comm.).

St. Eustatius is a small (21 km²) volcanic island in the northern Lesser Antilles (17°30'N). The Quill (alt. 600 m) is a dormant volcano towards the southeastern end of the island, its slopes mostly covered with closed-canopy secondary forest. *Bursera simaruba* is among the common

trees. *Nasutitermes corniger* is very abundant throughout most of the lower- and mid-level forest.

Preliminary observations suggested that a) unlike elsewhere in the Lesser Antilles, a significant fraction of nests was not attached to a tree base, and b) nests were never associated with *B. simaruba*.

On a walk through mid-level forest, I recorded the positions of 50 *N. corniger* nests. None was above ground level, nor was any at or close to the base of any *B. simaruba*. I noted no galleries on *B. simaruba* trunks. Thirty of the 50 nests were directly attached to tree bases, whilst the other 20 were not (Fig. 1).

The distribution of nest sites is more continuous than the 30:20 dichotomy suggests. Some of the 30 attached nests were less tightly bound to the tree base than is usual in this species - a few were attached not to the trunk but to a large superficial root - while most of the 20 unattached

nests were close enough to particular trees to be considered associated.

The substantial minority of nests without direct attachment to a tree is unusual for this species. My working hypothesis is that colonies are typically founded at or in tree bases, as usual, and that some later move away from the tree. The relative advantages of nesting arboreally or at ground level remain unknown.

Avoidance of *B. simaruba* presumably has to do with its flaking bark. Galleries on trunks of this tree - which I have seen, but very seldom - are expected to be unstable.

These observations were made on a field trip organised by JoAnne N. Sewlal, who also helped with the figure. Our hosts on St. Eustatius were the St. Eustatius National Parks (STENAPA) and Caribbean Netherlands Science Institute (CNSI).

REFERENCES

Constantino, R. 2009. Catalog of the living termites of the New World. [Online] Available at <http://www.unb.br/ib/zoo/docente/constant/catal/family.htm> (Accessed 10 July, 2015).

Scheffrahn, R.H., Darlington, J.P.E.C., Collins, M.S., Krecek, J. and Su, N.Y. 1994. Termites (Isoptera: Kalotermitidae: Rhinotermitidae: Termitidae) of the West Indies. *Sociobiology*, 24:213-238.

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Fig. 1. Active *Nasutitermes corniger* nests with associated trees. **a)** Directly attached at a tree base. **b)** Not attached but with major galleries running up the trunk of the nearby small tree behind it.