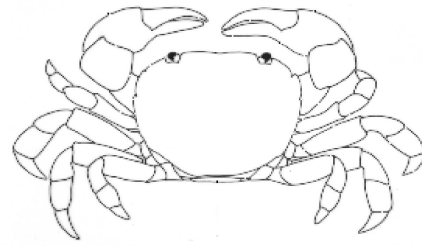


## A field guide to Kenyan mangroves



### *Neosarmatium smithi* H. Milne Edwards, 1853

Family: Sesarmidae



**Zone:** This large mangrove crab burrows from the seaward side of *A. marina* landward zone to the creek. Prefers muddy substrate. Generally found burrowing around *Rhizophora mucronata* roots - common in this zone.

**Habitat:** Burrowing to about 1 meter depth (Gillikin, 2000).

**Food:** Readily consumes leaf litter (Fratini et al., 2000; Gillikin, 2000) and probably feed on sediment and other crustaceans (Gillikin et al., 2001).

**Ecological notes:** This species is very shy in its habits and has been classified as nocturnal (Pinto, 1984 cited in Davie, 1994), however recent studies report they are diurnal (Fratini et al., 2000; Gillikin, 2000). They are medium sized crabs (maximum carapace width about 4.5 cm) of which little is known. Their burrows have not been described other than that they are complex structures that protrude above ground as a hollow cylinder (Pinto, 1984 cited in Davie, 1994). Macnae (1968) mentions the burrows of *N. smithi* may be 'turreted' and Hartnoll (1975) writes that they prefer the muddier regions of the swamp. Leaf-litter removal studies in areas where this species is present in Gazi Bay show that they are important litter consumers (Slim et al., 1997). They can withstand high salinities for short periods of time, but salinities of 65 prove fatal after about one week (Gillikin et al., 2004). Burrow associates include: *Sesarma guttatum*, mosquito larvae and mosquitoes, amphipods and the semi-terrestrial shrimp *Merguia oligodon* (Gillikin, 2000; Gillikin et al., 2001).



**Distinguishing characteristics:** Size (carapace width about 4cm), two prominent spines on top of claw, claws all red.



Claw detail (notice characteristic spines on top of claw)

**Geographical range:** *N. smithi* is widely distributed throughout the Indo-Pacific, but has been wrongly identified in the southwestern Pacific where it is replaced by its sister species *N. trispinosum* Davie, 1994 (Davie, 1994; Davie, pers. comm.). It occurs from South Africa (Emmerson, 1994) to Somalia (Vannini and Valmori, 1981) and in India and South-East Asia as far north as Japan (Davie, 1994).



*N. smithi* during laboratory experiments



## **MORE PHOTOGRAPHS OF *N. SMITHI***

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