

## New Distribution of Rhinoceros Beetle *Xylotrupes Taprobanes Ganesha*(Silvestre, 2003) in Tamilnadu,India

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### Abstract:

Rhinoceros beetle (*Xylotrupes taprobanes ganesha*) Silvestre, 2003 recently recorded from Nilgiri hills, Western Ghats. The distribution of this species were reported from Kerala and Tamil Nadu regions so far here after no works were done in this subspecies distribution so far in this region. This present observation ensure the occurrence of *X. Taprobanes Ganesha* in the Nilgiris show a light on this species ecological work in this region.

Keywords: **Rhinoceros beetle, Dynastinae, Xylotrupes taprobanes ganesha, Nilgiri hills, Western Ghats.**

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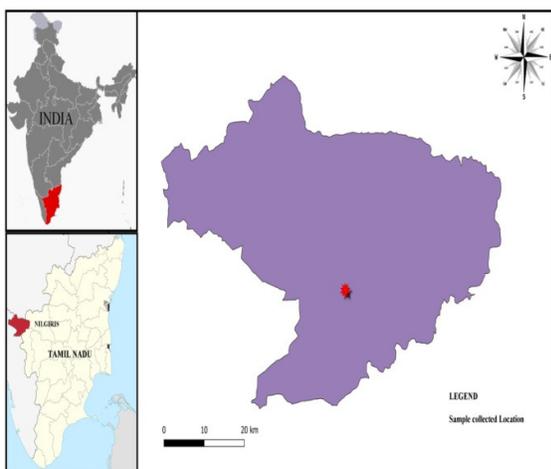
### I. INTRODUCTION

Dynastinae is subfamily of scarab beetle (Scarabidae) rhinoceros beetles are the largest extant insects on earth. Males have horns on the head and thorax. *Xylotrupes* is under the tribe of Dynastini. In this Genus are widely spread all over world. In India, *Xylotrupes* represent three species (i.e. *Xylotrupes meridionalis*, *Xylotrupes* A phylogenetic analysis noted that *Xylotrupes* is monophyletic and is composed of six lineages, which are treated as discrete species. The taxon *Xylotrupes gideon* of previous literature is shown to constitute five species. Explicit rationale, including morphological diagnoses and evidence of reproductive isolation, supports a new, readily testable taxonomic scheme that recognises the following species: *Xylotrupes florensis* in the Lesser Sunda and Tanimbar Islands, Indonesia; *X. meridionalis* in Sri Lanka and India; *X. ulysses* in Sulawesi, Moluccas, Australia, Papua New Guinea and Melanesia; *X. pubescens* in the Philippines,

Sumatra and Sulawesi; *X. mniszechi* in south-central and south-east Asia and China; and *X. gideon* in west Malaysia, Borneo and the Indonesian archipelago from Sumatra through the Lesser Sunda Islands. Subspecies are recognised in some of these taxa and are based upon geographic and phylogenetic partitioning by (Rowland, 2003). Two new subspecies recorded i.e. *Socrates Nitidus* (Silvestre, 2003) from Andaman Islands), while *X. Taprobanes Ganesha* (Silvestre, 2003) from south India. Major works on the Dynastinae of the world were done by Hermann Burmeister (1847). Arrow 1910 revised the Dynastinae research in the Indian sub-region. Chandra (2000) reported that 96 species of scarab beetles which includes a single species of dynastine beetle were recorded from Madhya Pradesh. Most of the researches were done in this species in the Northern Province of India.

## II. MATERIALS AND METHODS

During the insect survey, searching walking (1 Hour) method was adopted this study mainly riverside areas and grasslands and roadside areas were covered, the specimens were collected through the plastic containers for further identification the measurements were measured by the Vernier caliper and photographs were taken by Nikon D3200 DSLR 24 mega pixel



**Figure 1: Map of the Nilgiris (11.364N 76.794E), Tamil Nadu, India**

## III. RESULTS AND DISCUSSION

During the survey the road kill specimen of *X. Taprobanes Ganessa* were collected (at 06 July 2018) from Wellington, the Nilgiris (11.364N 76.794E), Tamil Nadu, India. According to the Silvestre (2003) the specimen was identifying as a *X. Taprobanes Ganessa*. Silvestre (2003) reported that the distribution of this species from Kerala and Tamil Nadu regions so far here after no works were done in this subspecies distribution so for in this region. This present observation ensure the occurrence of *X. Taprobanes Ganessa* in the Nilgiris show a light on this species ecological work in this region.

Its horns and its body thickness and length, colour are based on their origin (silverster, 2003) morphologically has

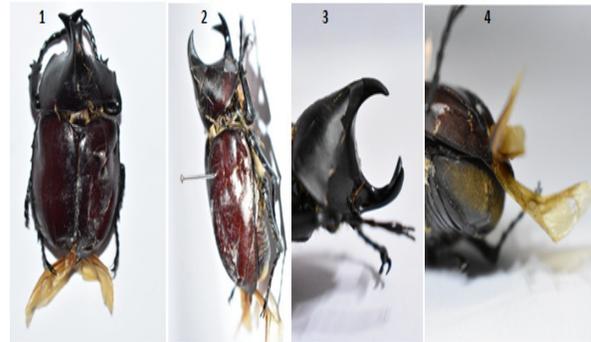
explored this and has researched it together with the combined species so that they could be compared to that species. So I have explained in detail the description of his morphological characters. Based on this, the species is known as *xylotropes taprobanes ganessa*.

Male: 58mm (up to 53 mm horn Based on this, the creature is known as slutusns included). Average height, broad shape, quite massive; glabrous, weakly shiny, dark brown, usually elytra clearer. Clypus broad, weakly emarginated, sharp angles. Canthus ocular salient, very broadly rounded, with no marked angles, punctuated on the outer edge; sinuate cheeks Mentum broad, the sides lined with a strong punctuation. Short mandibles, the very unequal apial lobes: rounded outer lobe, well developed, shorter inner lobe, thin, dentiform, more or less acuminate Fig (1) Cephalic quite short and thin, very broadly flared into a V-shaped apical fork with widely diverging branches, barely bent; the posterior surface is not careened at the base, but generally presents a small projection at the birth of the fork, at the point of convergence of the internal hulls of this one, the external hulls extending on the sides of the come decreasing; width total apical fork approximately equal to  $\frac{3}{4}$  of its length. Pronotum large (about 1.3 wider than long), more or less trapezoidal, the lateral edges barely curved or slightly sinuate, posterior angle broadly rounded; slightly satiny appearance shining, regularly punctuated average punctuation, with an undisclosed lateral zone of round points larger and tighter, often umbilicated; anterior side practically smooth, glowing (Figure 2) Short to medium thoracic horn implanted high on the disc, thin and slightly compressed laterally, the edges parallel or slightly flared towards the apex notched the triangle; a thin groove is frequently visible along the axis of the come; basal hulls slightly marked, not salient. Scutellum matte, punctuated-punctuated, clearly reborde. Elytres weakly shiny, broad and convex (about 1.13 times

longer than their common width) (Figure2), finely and irregularly punctuated (some points often more clearly aligned) on a more or less chaotic background; sutural streak consisting of dots spaced a little bigger. Pygidium densely punctuated except at the apex, the bearing very dense silks. Short and dense enough, not very visible. Parameters of the landscape strongly sinuate in lateral view, the apex is short and spatulate, the descending part has a small depression and a slight angulation on the inner edge (Figure2) (Silverster 2003).

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**Figure 2;**(1) short mandibles, broad shape, dark brown, (2) The lateral edges barely curved or slightly sinuate anterior side practically smooth, glowing, (3) Short to medium thoracic horn, broad and convex and (4) Pygidium densely punctuated except at the apex, the bearing very dense silks.

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