

Scientific Note

Notes on the records of *Suastus minuta aditia* Evans (Lepidoptera: Hesperiidae) in Southern West Bengal, India

Notas sobre los registros de *Suastus minuta aditia* Evans (Lepidoptera: Hesperiidae) en el sur de Bengala Occidental, India

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Abstract. *Suastus minuta aditia* Evans, 1943, a rare skipper butterfly is reported for the first time from Southern parts of West Bengal, Eastern India. Distribution of the subspecies and details of present records with photographs are given.

Key words: Butterfly, Purba Medinipur, range extension, *Suastus minuta*.

Resumen. *Suastus minuta aditia* Evans, 1943, una rara mariposa se reporta por primera vez en el sur de Bengala Occidental, India del Este. Se proporciona la distribución de la subespecie y detalles del presente registro con fotografías.

Palabras clave: Mariposa, Purba Medinipur, rango de extensión, *Suastus minuta*.

The Small Palm Bob *Suastus minuta* (Moore, 1877), is a small hesperid butterfly, with five subspecies viz., *S. m. bipunctatus* Swinhoe, 1894; *S. m. aditus* Moore, 1884; *S. m. aditia* Evans, 1943; *S. m. flemingi* Eliot, 1973 and *S. m. minuta* (Moore, 1877) confined in the Indo-malayan region (Evans 1943). In this species, flight is swift and rests with wings upright over its back, fond of flowers and bird droppings and usually seen in damp places (Kehimkar 2008). Distribution of this tiny skipper ranges from Sri Lanka, India (Western Ghats [Karnataka southwards], Sikkim eastwards to Arunachal Pradesh, Andaman), Bangladesh, Myanmar, Hainan, Thailand, Laos, Southern Vietnam, Cambodia and Malaysia (Evans 1949; Kehimkar 2008, 2016; Inayoshi 2019). In Indian region only three subspecies are recorded. While *S. m. bipunctatus* Swinhoe, 1894 is distributed from Kerala to Goa; *S. m. aditus* Moore, 1884 is confined only in Andamans and *S. m. aditia* Evans, 1943 is distributed from Sikkim to northeast India and it also occurs in Myanmar, Thailand, Laos, Vietnam, Hainan, Langkawi, W Malaysia (Varshney & Smetacek 2015; Chandrashekharan & Prashanth 2020; Inayoshi 2019). Here, we report and confirm the occurrence of *Suastus minuta aditia* Evans, 1943 for the first time from southern parts of West Bengal, India.

During, documentation on butterfly fauna of coastal areas of Purba Medinipur district, West Bengal, India an interesting hesperid butterfly *S. m. aditia* was encountered for the first time on 13.ix.2015, around 03:00 pm (Fig. 2A). It was perched on small tree branch, about

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90 cm above the ground with moderate canopy cover. Since then, about four years later, we spotted it again from the same locality on 28.iv.2019, around 12:10 pm (Fig. 2B). It was perched on a leaf, somewhat close to ground. Further, a single individual was observed on 19.ix.2019, around 01:45 pm (Figs. 2C, 2D). The individual was perched on a leaf about 30 cm above the ground in a shaded place. Most recently one individual was observed on 24.xi.2019 at about 02:20 pm (Figs. 2E, 2F). Initially it was basking on a leaf about 60 cm above the ground and then shifted to the nearby flowers of *Glycosmis pentaphylla* (Retz.) DC. for nectar feeding. All the individuals were observed from a particular locality of Bara Solemanpur village, Purba Medinipur, West Bengal, India (Lat 21°40'20.3514" N, Long 87°34' 33.1968" E, 4 ma.s.l.) (Fig. 1). Habitats of the place of observations were characterised by human settlements amidst of shrub vegetations, village woodlands, agricultural fields and ponds.

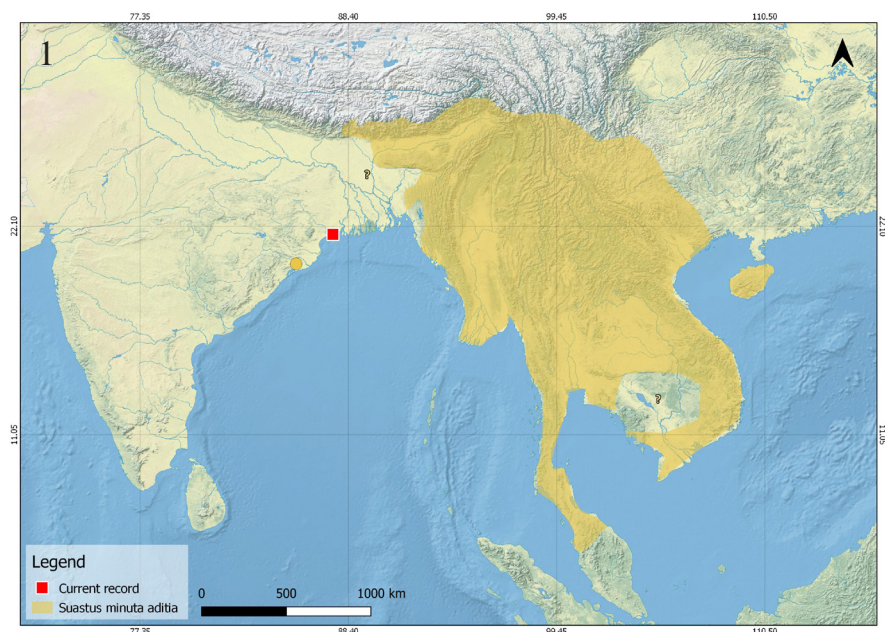


Figure 1. Map showing the new locality record of *Suastus minuta aditia* Evans, 1943 in Purba Medinipur District of West Bengal, India.

S. minuta aditia can easily be distinguished from rest of two Indian subspecies (*S. m. bipunctus* and *S. m. aditus*) by having whitish hindwing cilia, while its being dark brown in *bipunctus* and brown in *aditus* (Swinhoe 1912-13; Evans 1943). In *S. minuta aditia*, fully developed spots on upper forewing with 2 small well separated cell spots, spots in spaces 1b, 2, 3 and 6. Whereas upper forewing typically only with spots in spaces 2 and 3 in *S. m. bipunctus*; and in case of *S. m. aditus* upper forewing spots larger, but no apical spot in space 6 (Evans 1949). On under hindwing, spp. *aditia* having a series of suffused black discal spots with whitish discal patch (Kehimkar 2008, 2016); discal spots are comparatively darker than *S. m. bipunctus* i.e. very faint dark markings in *S. m. bipunctus* (Evans 1949).

Suastus minuta (Moore, 1877) is a lesser known species in Indian scenario. From southern West Bengal, it was previously recorded by Payra *et al.* (2017), where the subspecies was not mentioned and marked as very rare for southern parts of West Bengal. According to Kehimkar (2016), *S. minuta* was treated as “uncommon” butterfly for Indian region. Recently Nitin *et al.* (2018) documented larval host plants of spp. *bipunctus* as Palm (Arecaceae) species viz. *Calamus brandisii* Becc., *Calamus rotang* L., *Calamus travancoricus* Bedd., *Caryota urens* L., *Cocos nucifera* L., *Phoenix loureiroi* Kunth. Among these, *Calamus*

sp., *C. nucifera* and *P. loureiroi* are frequently found trees in the present surveyed area of Bara Solemanpur village, Purba Medinipur, West Bengal. In Indian region, spp. *aditia* has only few known records from some places of Sikkim to northeast India and single record from Khurda district of Odisha (Varshney & Smetacek 2015; Chandrashekharan & Prashanth 2020). Thus, the present record of the subspecies from Purba Medinipur District of Southern West Bengal has added a significant new locality for this elusive skipper and shows its continuous distribution from Odisha through West Bengal in Eastern India to North-East India.

In the surveyed area habitat alteration/ land conversion can be the major threat for this elusive skipper butterfly. As, with the increasing urbanization shrub vegetation's, village woodlands and small forest patches are gradually replacing by the buildings and concrete, which may cause reduction of host plant diversity and survival chances of these butterflies in such rapidly developing rural areas of Southern West Bengal. Therefore, further intensive survey is required to discover its host plants and population status in southern parts of West Bengal.



Figure 2. *Suastus minuta aditia* Evans, 1943 from Purba Medinipur District of West Bengal, India. A. Underside (13.ix.2015). B. Underside (28.iv.2019). C. and D. Underside and upper side of same individual (19.ix.2019). E. and F. Underside and upper side of same individual (24.xi.2019) (Photo Arajush Payra).

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