TAXONOMIC NOTES ON THE SATYRIUM SASSANIDES (KOLLAR) (LYCAENIDAE : THECLINAE : EUAMAENINI) FROM NORTH-WEST INDIA

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INTRODUCTION

Satyrium sassanides (Kollar) has been misidentified as a species under Strymon Hubner by most workers viz., Evans (1931), Wynter-Blyth (1957), Cantlie (1963) and Varshney (1997). As per the diagnosis of Strymon by Clench (1967), the male genitalia possess single acuminate cornutus in the aedeagus and small basally directed teeth on the tip of the valvae whereas as per diagnosis of genus Satyrium Sudder, the male genitalia possess two terminal cornuti and a ventral keel (Clench, 1978). Though the earlier workers had placed the species under Strymon, Bridges (1988) had rightly placed it separately under Satyrium. The male and female genitalia of Satyrium sassanides are being studied for the first time. During the course of present study, when the male genitalia of Satyrium sassanides examined, it was observed that the ventral keel was impregnated with two terminal cornuti in the aedeagus and not just one cornutus. This clearly substantiates the placement of the above mentioned species under Satyrium by Bridges (1988) and not under Strymon.

OBSERVATIONS

Genus Satyrium Scudder


*Type-species*: *Lycaena fuliginosa* Edwards.


*Generic diagnosis*: Forewing with 10 veins, hindwing tailless or with one or two tails but never a tail at 1A + 2A; male genitalia with vinculum laterally broad, abruptly becoming very slender towards saccus; saccus small, the latter prominent due to slenderness of adjacent vinculum; valvae contiguous proximally, distally abruptly divergent; aedeagus with ventral keel, impregnated with two terminal cornuti.

*Satyrium sassanides* (Kollar)

*Common name*: Whiteline Hairstreak.


*Adult*: Sexes similar, frontoclypeal area dressed with dark brown and white scales; eyes sparsely hairy; labial palpi with second segment long, below clothed with white and black scales; antenna with club not clearly differentiated, nudum limited to club. Thorax dorsally dark brown, ventrally decorated with white hair; each leg with a pair of tibial spurs, tarsi spiny. Forewing costa and tornus convex, above dark brown, below pale brown, a narrow white discal band present, and the latter inwardly edged black, marginal line and marginal spots obscure. Hindwing oval, termen concave between veins Cu1a and 1A + 2A, dorsum concave between vein 3A and tornus, tailed at Cu1b, tail 3.5 mm long, black with apex white; undersurface pale brown with a narrow white discal band, the latter inwardly edged black, a linear white marginal line present, three orange crowned and inwardly black edged spots present in Cu1a, Cu1b and at tornus, marginal spots in M2 and M3 minute.

*Venation*: Forewing with discal cell more than half the length of the wing, veins Sc and R1 approximating, veins R3 and R4 absent, veins R5 and M1 widely separated at base, vein M2 closer to
vein M\(_1\) than vein M\(_2\), discocellulars complete; hindwing discal cell less than half of the wing, vein M\(_2\) equidistant between veins M\(_1\) and M\(_3\), discocellular veins present.

**Male genitalia:** Uncus with each lobe broad, apex rounded, pilose; brachia slender, curved at base, arms narrow, pointed; subscaphium very long, band-like; tegument large, broad; vinculum very wide proximally, suddenly becomes narrow distally to receive short saccus, the latter with rounded apex. Valva penguin-shaped, basal half oval, costa and saccus narrow, upper half narrow, slightly curved downwards with pointed apex, pilose; juxta absent; aedeagus long, slender, narrow, suprational portion fairly larger than subzonal portion, slightly curved, ductus entering dorsad, coecum very short, apex with a keel, vesica with two cornuti, the latter well developed.

**Female genitalia:** Lodix small, irregular, somewhat star shaped.; genital plate absent; ductus seminalis entering at junction of dutus bursae and corpus bursae; ductus bursae well sclerotized; corpus bursae fairly large, globose, base sclerotized, a pair of triangular signae present; apophysis anterioris absent; apophysis posterioris long, narrow; papilla analis elongated, pilose.

**Wing expanse:** Half: Male: 15.0-17.0 mm.

Female: 16.0-18.0 mm.


**Former distribution:** Kashmir, Ladak, Pangi, Mussoorie, Shimla hills, Chitral, Afghanistan, Baluchistan, Persia.

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**Photo 1:** Male (dorsal view)  
**Photo 2:** Male (ventral view)

*Satyrium sassanides* (Kollar) (Male)
Remarks: The survey shows that the species is commonly available in Pangi valley from where it has earlier been reported by de Niceville (1890). The first record of the species is from localities Trilokinath and Keylong. However, the species could not be collected from localities such as Mussoorie and Shimla inspite of repeated surveys from 1992-1995 and then 2005-2006.

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