Introduction
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The Indian Himalaya is a mountain range that span ten states of India namely Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh, Meghalaya, Nagaland, Manipur, Mizoram & Tripura as well as hill regions of two states Assam & West Bengal. This region is responsible for providing fresh water to a large part of Indian subcontinent & contains varied fauna & flora. Himalayan region is the second “Hot spot” of biological diversity in India after Western Ghats. This “Hot spot” of biological diversity is supporting a large number of insect orders, among them Trichoptera (caddisflies) are economically one of the most important insect order whose immature stages are totally dependent on aquatic ecosystem.

The order Trichoptera comprises a group of holometabolous insects closely related to the order Lepidoptera, together the two orders form the superorder Amphiesmenoptera. Adult trichopterans ranges in size from minute with a wing span of less than 3 mm, to large with a wing span approaching 100 mm. Some species have striking colour and wing patterns but the colour generally varies from dull yellow to grey or from brown to black. They are moth like insects with wings covered by hair, not scales as in Lepidoptera. Adults have prominent antennae and in some species the antennae are exceptionally long (more than double the length of the forewing). With some exceptions the adults have well developed maxillary and labial palps, but never the coiled proboscis that characterizes most adult Lepidoptera.

Trichopteran larvae are probably best known for the transportable cases and fixed shelters that many, though not all, species construct. Silk has enabled the larvae to develop an enormous array of morphological adaptations for coping with life in almost any kind of freshwater ecosystem (Wiggins, 1996, 2004). These larvae can be distinguished from all other insects with segmented thoracic legs, by the presence of a pair of anal prolegs, each with a single curved terminal claw and very short, sometimes almost invisible single
segmented antenna. The pupae are exarate and covered by a semitransparent integument and if fully developed reveals the pharate adult inside. The pupae usually possess a pair of strong functional mandibles (non functional in adult) and the abdomen with a number of segments adorned with characteristic sclerotised, dorsal hook-bearing plates. The larval and pupal stages of Trichoptera are, with a few exceptions, entirely dependent on an aquatic environment and are usually abundant in all freshwater ecosystems, from spring sources, mountain streams, large rivers, the splash zones of waterfalls marshy wetlands, along shorelines and in the depths of lakes, to temporary waters. Certain species are tolerant to high salinities and the species in family Chathamiidae have managed to colonise tidal pools along the sea shore in New Zealand and eastern Australia. Some species inhabit the brackish inshore waters of the Baltic and White seas.

Fischer (1960-1973) produced a world catalogue of caddisflies that recorded 5,546 species. The recently published work of Holzenthal et al. (2011) records 14,999 species (14, 291 extant, 608 fossil, 100 nomina dubia). These species are referred in 688 genera (601 mostly extant, 85 fossil, 2 nomina dubia) and 56 families (49 extant, 7 fossil). New species continue to be described at a considerable rate and it seems particularly from ongoing studies in the Neotropics, Madagascar, humid regions of Africa, South-east Asia, China and Phillipines that the prediction of Schmid (1984) and Flint et al. (1999) although considered an overestimates by Malicky (1993), that there are in excess of 50,000 species may be closer to the actual figure (de Moor and Ivanov, 2008). Out of 14,291 species discovered, more than half of these known species were recorded from only two regions, the Oriental and Neotropical Regions (de Moor and Ivanov, 2008). The highest species diversity is recorded in the Oriental region. With more than 3,700 species, it contains more than double the recorded species for each of the other region, except the Neotropics (de Moor and Ivanov, 2008). In India order Trichoptera is
represented by 27 families, containing 1046 species under 94 genera (Sharma & Chandra 2009).

Trichoptera are abundant in all types of natural aquatic ecosystems. They are apneustic and rely on dissolved oxygen for respiration. With a high diversity of species having both case and shelter constructing larvae, they are useful indicators of organic pollution. Trichoptera have been used extensively in biomonitoring assays as indicator species, selected communities or assemblages of species or more broadly based family level identification of species being used to assess the health status of aquatic ecosystems. Trichoptera together with other aquatic insect orders, have also been used to assess aquatic biodiversity EPT (Ephemeroptera, Plecoptera and Trichoptera) or ETS (Ephemeroptera, Trichoptera, Simuliidae) and habitat diversity (Hannaford & Resh, 1995; Hewlett, 2000; de Moor, 2002).

From an ecological perspective, Trichoptera are important processors of organic matter and provide a keystone taxon in the development of the river continuum concept (RCC) (Vannote et al. 1980). As processors of organic matter, collectively known as the functional feeding groups (FFG) of animals, they display the full array of feeding modes (Cummins, 1973). In lotic water filter feeding, shelter constructing species are important predators of blackfly larvae and help to keep population levels of pest species at acceptable level (de Moor, 1992). Trichoptera larvae, pupae and adults also form an important link in the food chain and they have also been used extensively by trout fishing enthusiasts as models for “flies” (McCafferty, 1981). Keeping in view the above mentioned taxonomic and ecological importance of this order, the current entomological research problem covering the families of Plenitentoria group of caddisflies have been selected and a platform has been established for the future workers, interested in studying different aspects of this group.

Inspite of their immense economic importance, these insects remained ignored at the hands of Indian naturalists. Whatever, scattered works are available those are all by the foreign workers who either got the material from
the various Indian museums on the loan basis or collected it during different expeditions. Out of the total caddisfly fauna (about 4000 species) as estimated by Schmid (1984) only one fourth is on record. The remaining is yet to be enlisted and worked out. The present study deals with the taxonomy of the Plenitentoria group of caddisflies from the Indian Himalaya which is represented by 8 families; Phryganeidae Leach, Phryganopsychidae Wiggins, Limnephilidae Kolenati, Apataniidae Wallengren, Uenoidae Iwata, Lepidostomatidae Ulmer, Branchycentridae Ulmer and Goeridae Ulmer. Till date 21 genera, covering 148 species of Plenitentoria group are recorded from India out of which 142 species are known from the Himalayan belt alone (Table II). The significant contributions to this group in India are by Schmid (1962, 1965, 1968, 1991, 1992), Kimmins (1950), Martynov (1936) and Mosely (1936, 1941, 1949a, b, c). However from many angles the existing knowledge on this group is far from completion, so the present research endeavor was taken to streamline the taxonomy of Plenitentoria group. During the present study 2008-2011 extensive and intensive survey of high altitude regions, ranging from 400 m amsl in Tamin (Arunachal Pradesh) to as high as 4000 m amsl in Apparwat (Jammu & Kashmir) were made. The list of the localities covered during these four years is given in table I and in maps.

A noteworthy contribution of the present studies includes construction of the keys, covering the subfamilies, genera and species of entire Plenitentoria group. 77 species have been collected during the present study. Out of these 25 species of Lepidostoma Rambur and 1 species of Paraphylogteryx Ulmer of the family Lepidostomatidae are new to science. 2 species of the genus Lepidostoma Rambur are first records from India, earlier reported from Nepal and Bhutan respectively. 2 species of the genus Pseudostenophylax Martynov and one species of the genus Limnephilus Leach belonging to the family Limnephilidae are new to science. 1 species of the genus Pseudostenophylax Martynov is a new record from India, which was earlier reported from Pakistan. 1 species of the genus Astratodina Mosely is recorded first time from
India earlier recorded from Pakistan. 2 species of the genus *Goera* Stephens belonging to the family Goeridae are new to science. 2 species of the genus *Eubasilissa* Martynov belonging to the family Phryganeidae are new to science. Female of *Eubasilissa asiatica* Betten belonging to family Phryganeidae is described and illustrated for the first time.

Field observations reveal that this group is almost non-existent below 1200 m. Family Limnephilidae is confined only to temperate zones. Some of the specimens particularly of the family Lepidotomatidae and Limnephilidae were also collected during day time from the vegetation near the rivers, lakes, streams, marshy grasses and also from the springs. Observations and field studies reveal that there is an excess of males in light-trap catches of Trichoptera, which is in accordance with earlier study (Svensson, 1972). It was observed that caddisflies are active and abundant between 5.30 p.m. to 10.30 p.m. in North eastern states and between 7 p.m. to 11.30 p.m. in North west Himalaya. After this period, their number starts declining.

Holotypes have been designated for all the new species. Descriptive account of each species includes bibliographic reference, synonymy (if any), detailed description, material depository, material examined and diagnostic combinations. While compiling this work, the author is quite aware of the fact that no work is complete and foolproof as standards and parameters change with time and advancement of science. Last but not the least, it can be said with little authority and more hope that this work will smoothen and stabilize, the so far scattered and unstable taxonomic works concerning this group and will form a new platform for future workers who wish to work on this economically important order.