Adult butterflies form an important part of flowering plant–pollinator guild; they are nectar feeders and occasionally pollen feeders (Gilbert, 1984) in whom a suckorial proboscis has a single common origin (Krenn et al., 2005); in feeding, they contribute to pollination (Lewis, 1989; Lewis and Lipani, 1990; Goulson et al., 1997a; Weiss, 2001; Weiss and Papaj, 2003).

From the butterfly side, access is determined by proboscis length, but suitability for exploitation depends on the wing loading of butterflies. Maximum corolla depth of potential nectar plants limits species feeding on them to those with sufficiently long tongues; short-tongued butterfly species are therefore unable to feed on deep flowers and corolla depth has been shown to place a limit to exploitation by nectar feeding butterflies (Corbet, 2000).

However, long-tongued butterflies do not necessarily feed on flowers with shallow corollas. Those with high wing loading have different, more demanding energetics (Betts and Wootton, 1988), and require either rich nectar supplies or abundant, clustered nectar supplies accessible with low foraging costs. Among temperate butterflies, those with high wing loading confined their visits to plants with clustered flowers and/or rich nectar supplies, whereas butterfly species with low wing loading included solitary and less rich nectar plants in their diet (Corbet, 2000).

The nectar of flower is the main source of adult nutrition (Omura and Honda, 2005). The floral scent is a vital signal used by butterflies initially to identify and subsequently to recognize and distinguish among worthwhile plants (Anderson, 2003). While a large number of butterflies obtain their nutrients from flower nectar and pollen, there is a group of butterflies that apparently never visit flowers. These are usually thick-bodied butterflies that seem to require richer foods to supply their powerful flight muscles, such as members of the genera Euthalia Hubner, 1819; Kallima Boisdvalu, 1836; Charaxes Ochsenheimer, 1816; Dilipa Moore, 1858 and Sephisa Moore, 1882; in Asia and Africa (Bhuyan et al., 2014). Many of the species of Nymphalidae are very foul feeders, they have been collecting their nutrients from carrions. One of the most successful modes of capturing many species of rare butterflies is to place rotten fruit or some other attractive, strong-smelling bait on the ground near their haunts, when number of specimens may often be found busily regaling themselves where previously not an individual was to be seen (de Nicéville, 1886).

This paper deals with the unusual records of male Melanitis leda leda Linnaeus, 1758 (Common Evening Brown) feeding on Mikania cordata (Asteraceae, older name Compositae), is a common obnoxious weed native to Bangladesh (Ahmed, 2008). This vine with serrated leaves and many white flowers is locally named as Assamlata, Germanlata and Taralata. Usually the flowers bloom in dry season. This plant is a good source of nectar of different insects viz. coleoptera, hemiptera, dipteras, lepidoptera etc.

This unusual nectaring behaviour of Melanitis leda leda observed on 28 November 2015 at Padma Pukur (23°49'20.21"N; 90°20'46.24"E) of National Botanical Garden in Mirpur-1, Dhaka, Bangladesh. This butterfly was observed feeding nectar on flowers of Mikania cordata about 3.45 min 1-1.3 m above from the ground. The proboscis was inserted into the corolla of the flower. Melanitis leda leda typically sighted flying at dawn and before dusk, at and around grass patches, thickets or dense vegetation (Kehimkar, 2013). The adults fly rapidly at low level and in short hops. Normally, Melanitis leda leda never visited flowers. It has been observed to puddle on wet grounds fallen and rotting fruits attract this butterfly. In the dry season the abundance of Melanitis leda leda increase due to a large brood that emerges after diapause in post monsoon. Seasonal climatic changes affect the feeding behaviour of insects and their preference of plants or plant products. Changes in the availability of suitable habitat for adult butterflies in urban areas seems to be one of the reasons for the shift to nectar plant

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presumably for nectar. Butterfly is considered as a crucial bioindicator group of entire ecosystem (Kehimkar, 2013). This group of bioindicators can detect any changes in the natural environment, monitor for the presence of pollution and its effect on the ecosystem in which they live, monitor the progress of environmental cleanup and test substances.

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References


