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Abstract: Present study envisages the result of studies conducted on various aspects of biology, seasonal incidence and management of lace bug, *Cochlochila bullita* (Stål) in the laboratory as well as field, experiments were conducted during 2014-15. Under laboratory conditions eggs were laid by the female bug mostly singly but sometimes in groups also on the under surface and margin of leaves and tender shoots within the air chamber. The incubation period varied from 3 - 7 (mean 5 ± 1.24) days. The nymph passed through five instars to complete the nymphal period. Newly moulted nymphs were pale brown in colour. Later on, the cuticle colour changed to brown to black. The first instar lasted for 2 to 4 (mean 2.9 ± 0.73) days. The second instar occupied 2 to 4 (Mean 2.8 ± 0.78) days. The third instar larval duration was for 2 to 3 (mean 2.3 ± 0.48) days. The Fourth instar occupied 1 to 3 (mean 2.0 ± 0.81) days. The fifth instar took 1 to 2 (mean 1.2 ± 0.42) days for its development. The total nymphal period varied from 8 to 16 (mean 19.8 ± 3.58) days. The total life cycle of *C. bullita* from egg to adult emergence varied from 11.0 to 23.0 (mean 19.8 ± 3.58) days. Females were significantly larger than male with respect to body length. The female can be differentiated from the male by the presence of an ovipositor whereas male has a distinct genital capsule with hidden structure (parameres). The adult individuals reared in the laboratory survived for 27 to 36 days with average of (mean 33.7 ± 4.78) days. Total life duration was recorded as: 38-59 (mean 50 ± 8.39) days. The incidence of lace bug on tulsi commenced from the October, 2014 and continued till the month of January, 2015. Maximum bug population (43.2 insects per plant) was recorded during 52 standard week of December, 2014. All weather parameters except relative humidity (RH) at 07 hrs and 14 hrs had significant impact on lace bug population on tulsi. All these weather parameters together produced 86 per cent impact on lace bug population. Among the chemical insecticides and plant products under test, overall best performance was found in case of three times spraying of prophenophos 50EC @ 1 ml/l applied at fortnightly intervals in reducing lace bug population 6.20, 4.70, 3.37 lace bug per plants as against 20.40, 33.40, 43.20 lace bug per plant in untreated control after 1st, 2nd, and 3rd spraying which was at par with imidacloprid 17.8 SL@ 0.3ml/l and malathion 50 EC@ 1ml/l. All plant products were least effective in reducing the lace bug population in comparison to synthetic chemicals but significantly superior to the untreated control. The overall mean per cent reduction in lace bug population, was recorded with prophenophos (73.97 %) followed by imidacloprid (68.40 %) and malathion (67.49 %) as compared to 45.22 %, 44.81 %, and 41.41 in karanj oil @2%, NSKE@5% and neem oil 2% after 3rd spray. Damage intensity caused due to infestation of *C. bullita* on the tulsi crop was also assessed by estimating the fresh herbage yield under protected and unprotected conditions. In protected plot yield was 5.4 tonnes/ ha whereas in unprotected plot yield obtained was 3.6 tonnes/ ha. Therefore, 33.33 per cent herbage yield loss was recorded in unprotected plot when compared with protected plot.

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