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Positioning cluster bean, *Cyamopsis tetragonoloba* L. in an effective way to reduce the major insect pest load of okra, *Abelmoschus esculentus* L.

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ABSTRACT : Field experiment was carried out to evaluate the role of cluster bean in suppressing the major insect pest load in okra crop by sowing in various fashions. Strip sowing of cluster bean adjacent to okra plots (T_1) proved most superior to fulfill the prime objective as compared to border sowing (T_2) and skip row sowing (T_3), respectively. Sucking pests like okra leaf hopper and whitefly population found least (1.40-12.82 and 0.00-8.72 per 3 leaves, respectively) in T_1 as compared to T_2 (1.75-16.94 and 0.25-11.25/3 leaves respectively) and T_3 (1.50-20.54 and 1.54-14.55/3 leaves, respectively). Similar trends were also encountered in case of highest shoot borer (18.72, 15.44, 13.30 and 12.32% mean shoot infestation) and leaf roller (0.35, 0.25, 0.20 and 0.10 mean larval population per plant) infestation in T_4 followed by T_3, T_2 and T_1, respectively. But, population of coccinellid predators and spider complex found significantly highest in T_1 (1.46 and 0.85 number of motile stages per plant), followed by T_2 (1.10 and 0.71 number of motile stages per plant) and T_3 (1.05 and 0.70 number of motile stages per plant) respectively. Mean per cent tender fruit infestation of okra by *E. vitella* was also found significantly lower in T_1 (5.17-13.95%) along with highest yield potentiality of 10.55 t/ha as compared to other treatments. T_4 registered lowest yield of tender marketable okra (6.39 t/ha) and proved the effective role of cluster bean in the reduction of major insect pest load under okra agro-ecosystem in a sustainable way.

Key Words : Cluster bean (*Cyamopsis tetragonoloba* L.), okra (*Abelmoschus esculentus* L.), several predator insect pests (*Earias vitella, Earias insulana, Helicoverpa armigera*, *Sylepta derogata*), yield loss.