Conclusion
5.0 CONCLUSION

5.1. Oligidic diet

Total nymphal development period was 20 days prolonged in Oligidic diet than factitious host Corcyra cephalonica. However, not much variation was observed in sex ratio and adult longevities. The nutritional value of the tested meat-based oligidic diet was sufficient enough to continuously rear Rhynocoris marginatus. Moreover production of this diet is simple and inexpensive (@ US 3.2 and 1.30 for C. cephalonica and OD respectively) hence this OD can be considered as an alternative food source for the mass raring of R. marginatus. This diet is a valuable alternative food source for the raring of R. marginatus. This reduviid is a voracious predator of many species of arthropods and might be able to sustain itself on pest and oligidic material for long periods of time.

5.2. Microbiology

Among the five diets, Rhynocoris marginatus reared with OD has more number of bacterial species with poor proportions. This may be due to the antimicrobial agents. A comparison of extra cellular enzymes produced by the isolated strains reveals that OD and insects did not showed by differences in enzyme activity. This suggested that OD affect the microbial population and also their enzyme secretion.
5.3. Enzymology

The higher of amylase, invertase, and protease activities in the foregut indicates the ability of \textit{R. marginatus} to digest carbohydrates and protein of the prey and oligidic diet. Long term maintenance of the predator on \textit{C. cephalonica} and \textit{S. litura} and OD as well as transmission of adult and nymph form one type of food to another were found to not significantly influence amylase, lipase, protease, and invertase activities in the alimentary canal. The ability to use prey macromolecules might enable to survive in the absence of prey for short periods of time, which would enhance the potential of this bug as a biological control agent.

5.4. ELISA

The quantity of prey consumed, and postmeal time all affected the qualitative and quantitative outcome of the indirect ELISA. These variables make the accurate quantification of predation very difficult using immunoassay procedures. While gut content immunoassays offer a good method of qualitatively estimating predation.

5.5 RAPD analyses

These results also provide a molecular basis for identifying \textit{R. marginatus} nutritional studies of inter specific competition especially feeding strategies. Monitoring inter specific genetic variation of potential classical biological control agents will improve the success of biological control. Further, the data suggest that the opportunity for detecting DNA differs with diets. Its further evaluation as a biological control agent is warranted.
5.6. Biological control potential

Both the laboratory and field studies shows the biological control potential of this reduviid predator. The both oligidic diet and insect prey reread *R. marginatus* greatly suppressed the pest population and their infestation and turned to increase the number of pods, production and cost benefit ratio. Groundnut cultivars can use both OD and insect reared reduviids as biological control agent. However, OD an insect reared reduviids. is better than natural prey reared reduviids.