

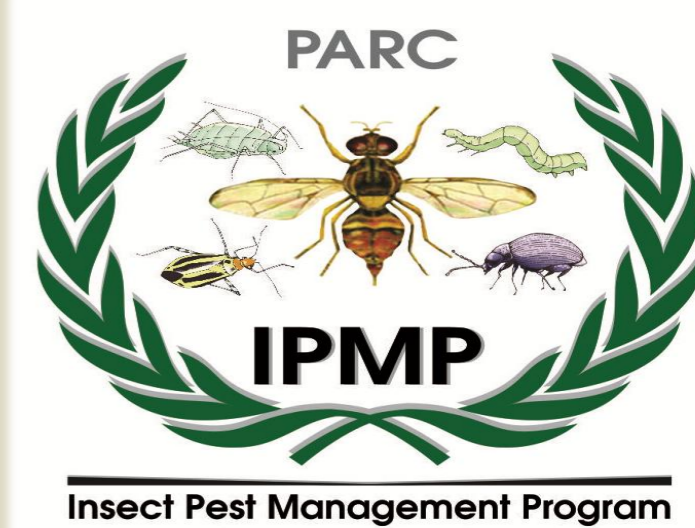
Can an artificial diet influence the rearing success of *Spodoptera frugiperda* and its parasitism efficiency by the egg parasitoids?

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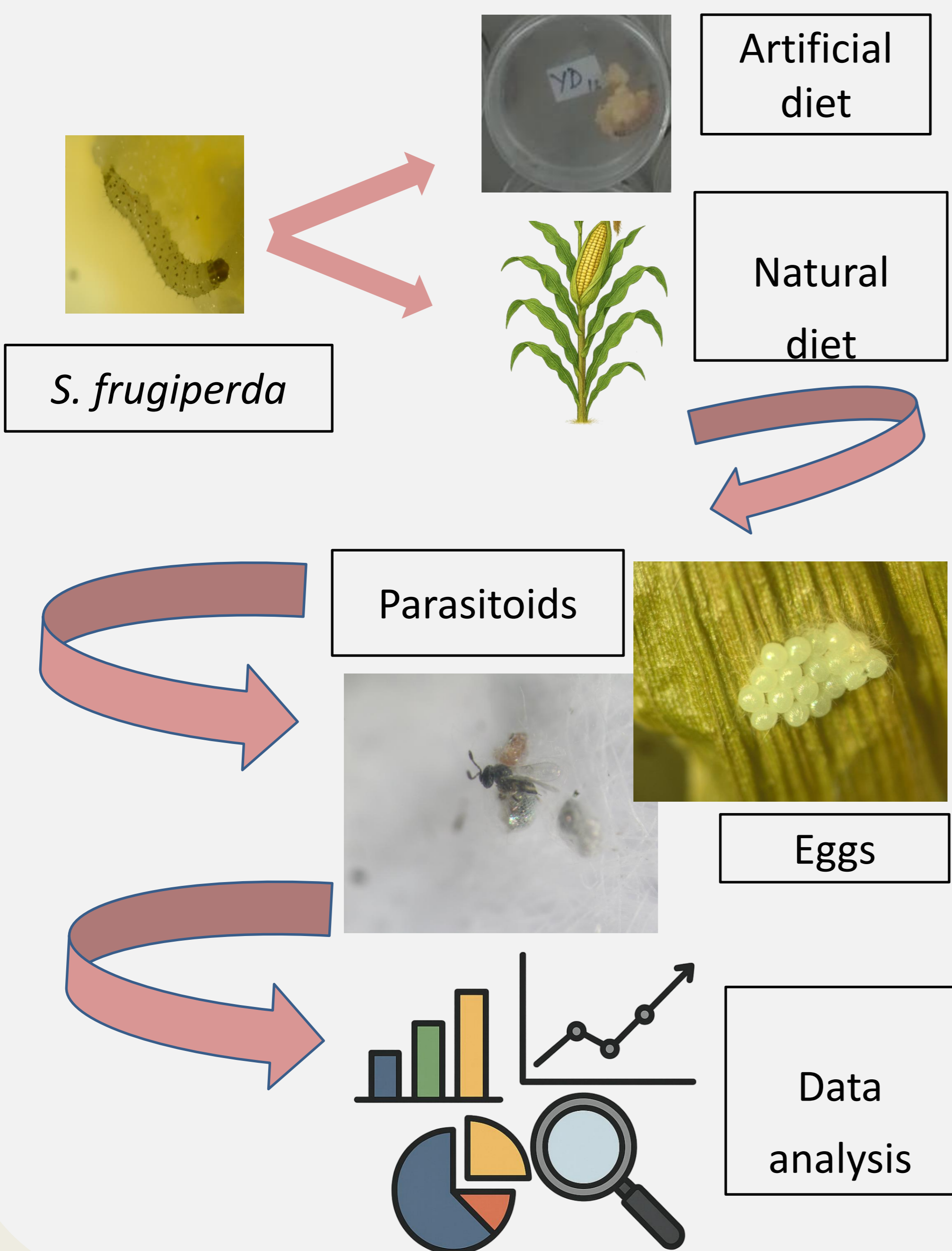
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INTRODUCTION

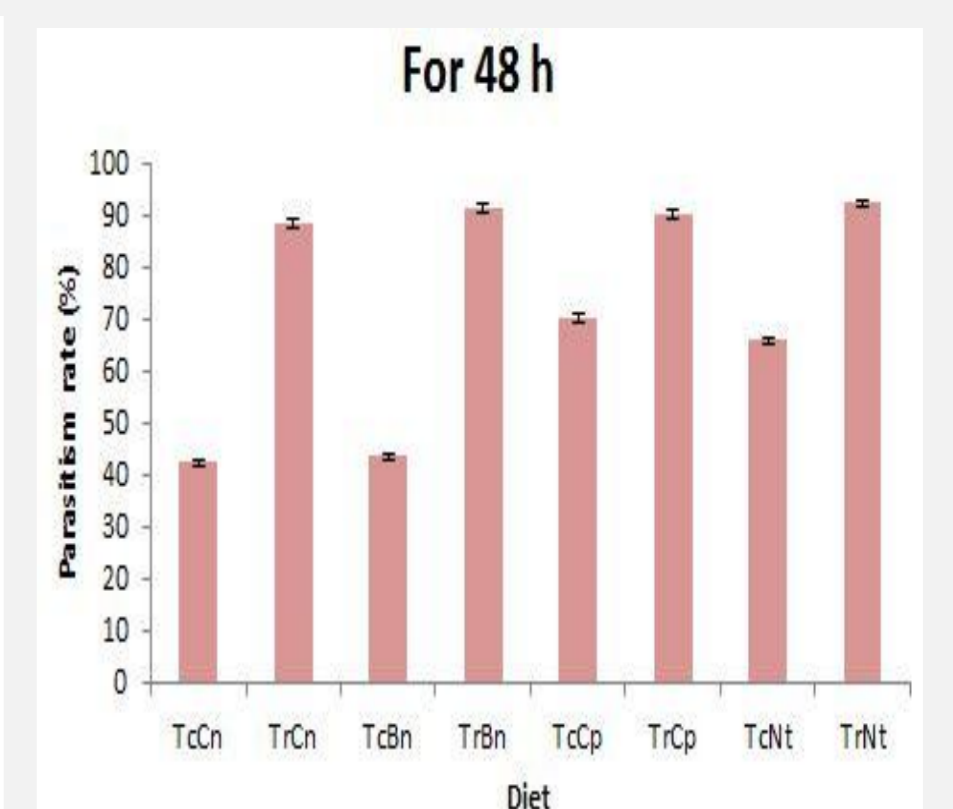
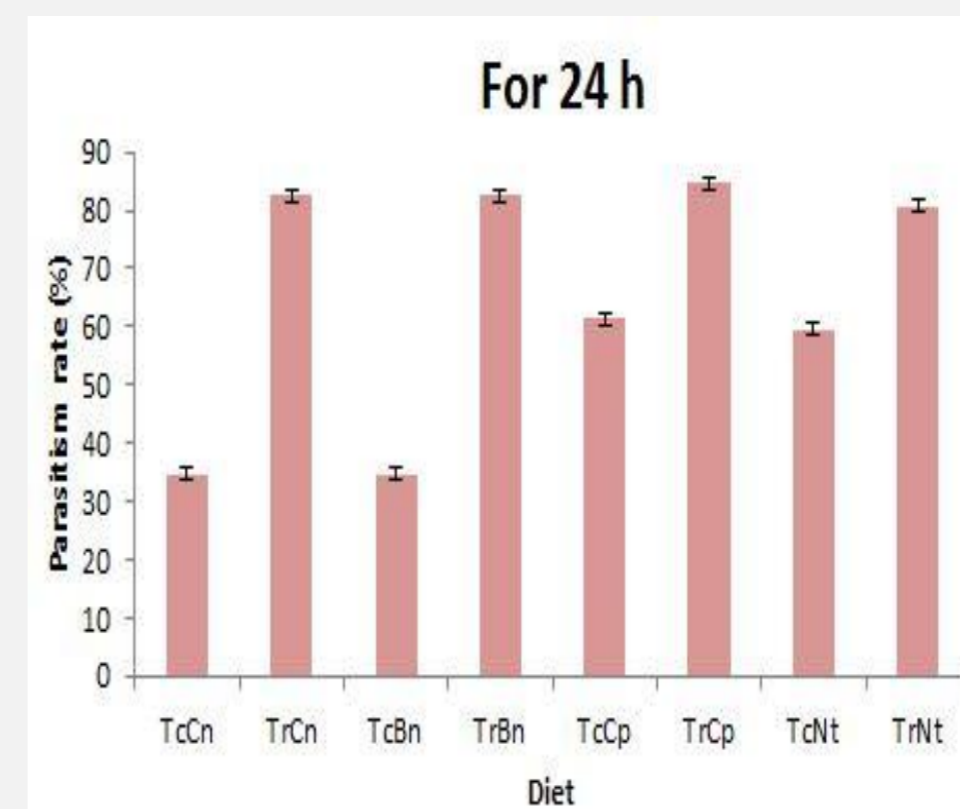
- Spodoptera frugiperda* is an invasive sp. in Pakistan, leading to significant losses to the maize crop.
- The developed resistance to conventional pesticides entails alternative and sustainable control methods.
- Egg parasitoids such as *Trichogramma chilonis* and *Telenomus remus* act as promising biological control agents against *S. frugiperda*, but efficient mass rearing of both parasitoid and its host is crucial.
- It is conducted to check and suggest the most suitable diet for mass rearing and biological control.

METHODOLOGY



RESULTS

Parameters/ Stages	Natural diet (d±S.E)	Chickpea diet (d±S.E)	Corn diet (d±S.E)	Bean diet (d±S.E)
Total larval duration	18.18 ± 0.12 c	16.94 ± 0.278 d	22.5 ± 0.27 b	29.4 ± 0.332 a
Pre-pupa	2.06 ± 0.03 b	1.7 ± 0.107 c	2.17 ± 0.07 a	2.03 ± 0.11 b
Pupa	7.26 ± 0.06 c	6.45 ± 0.124 d	7.45 ± 0.09 b	7.69 ± 0.089 a
Adult longevity				
Female	8.07 ± 0.058 b	7.31 ± 0.067 d	7.98 ± 0.093 c	8.83 ± 0.039 a
Male	6.01 ± 0.028 b	5.78 ± 0.021 c	5.77 ± 0.03 c	6.99 ± 0.046 a
Fecundity	692 ± 1.89 d	841 ± 2.03 b	879 ± 1.77 a	731 ± 2.11 c



Tc (*Trichogramma chilonis*), Tr (*Telenomus remus*), Cn (Corn), Cp (Chickpea), Bn (Bean), Nt (Natural)

CONCLUSION

From the results, it can be concluded that chickpea was the most suitable diet for the rearing of *S. frugiperda* while the least compatible diet was a bean-based diet.