Supplementary Materials

Fig. S1. Egg batch laid by *Sycanus annulicornis.*

(a)   **(b)**

Fig. S2. *S. annulicornis* preying on *Crocidolomia pavonana* larvae: (a) nymph of third instar, (b) adult.

(a)   (b)

Fig. S3. *S. annulicornis* preying on *Tenebrio molitor* larvae: (a) nymph of fifth instar, (b) adult.

(**a**)   (**b**)

Fig. S4. *S. annulicornis* preying on *Setothosea asigna* larvae: (a) 5th instar nymph, (b) adult.

Fig. S5. *S. annulicornis* piercing and sucking a larger caterpillar in the laboratory.

Table S1. Number of *T. molitor* consumed by the nymphs and adults of *S. annulicornis.*

Development stages	Day of observation							Mean
	1	2	3	4	5	6	7	
1st instar	0	0	1	0	1	0	1	0.43
	0	0	0	1	0	1	0	0.29
	0	0	0	0	1	0	1	0.29
	0	0	0	0	1	0	1	0.29
	0	0	0	0	0	0	1	0.14
	0	0	0	0	0	0	1	0.14
	0	0	0	0	1	0	1	0.43
	0	0	0	0	1	0	1	0.29
	0	0	0	1	0	1	0	0.29
	0	0	1	0	0	1	0	0.29
	0	0	0	0	0	1	0	0.14
	0	0	0	0	1	0	0	0.14
	0	0	1	0	1	0	1	0.43
	MEAN ± S.D.							**0.27 ± 0.11**
2nd instar	1	0	0	0	0	0	0	0.14
	1	0	0	1	0	0	0	0.29
	1	1	0	1	1	0	0	0.57
	1	0	1	1	1	0	0	0.57
	0	0	1	0	1	0	0	0.29
	1	0	1	0	1	0	1	0.57
	0	0	0	1	1	0	1	0.43
	0	0	1	0	1	1	0	0.43
	0	0	1	0	0	0	0	0.14
	1	0	0	1	0	0	0	0.29
	0	0	1	0	1	1	0	0.43
	0	0	0	1	0	0	0	0.14
	0	1	0	0	1	0	0	0.29
	MEAN ± S.D.							**0.35 ± 0.16**
3rd instar	0	1	0	0	1	0	0	0.29
	0	1	0	1	0	0	0	0.29
	0	1	0	0	1	0	0	0.29
	1	1	0	2	0	0	1	0.71
	0	2	0	0	1	0	0	0.43
	0	2	0	0	1	0	1	0.57
	0	1	1	0	1	1	0	0.57
	1	0	1	0	1	0	0	0.43
	0	0	2	0	0	0	1	0.43
	1	0	1	0	1	0	1	0.57
	1	1	0	0	1	0	0	0.43
	0	0	1	0	0	1	0	0.29
	1	0	2	0	0	1	1	0.71
	MEAN ± S.D.							**0.46 ± 0.17**
4th instar	1	2	0	0	1	1	0	0.71
	1	0	1	1	0	2	0	0.71
	0	1	0	1	1	0	0	0.43
	0	1	1	1	0	0	1	0.57
	0	0	1	1	0	1	1	0.57
	0	1	0	1	0	1	0	0.43
	1	0	2	0	0	1	0	0.57
	1	1	0	1	0	1	1	0.71
	1	0	0	1	1	1	0	0.57

Development stages	Day of observation							Mean
	1	**2**	**3**	**4**	**5**	**6**	**7**	
4th instar	2	0	0	1	0	1	1	0.71
	1	1	0	0	1	1	0	0.57
	1	0	1	0	1	1	0	0.57
	1	1	0	1	1	0	1	0.71
	MEAN							**0.60 ± 0.10**
5th instar	2	0	1	0	2	0	0	0.71
	2	0	1	1	1	0	2	1.00
	0	2	0	0	1	0	0	0.43
	2	1	1	2	1	2	1	1.43
	0	1	1	1	0	2	1	0.86
	1	1	1	1	0	2	1	1.00
	2	0	1	0	1	0	1	0.71
	1	1	0	1	0	1	1	0.71
	2	0	1	1	1	1	2	1.14
	2	0	1	0	1	0	0	0.57
	1	2	1	1	2	1	2	1.43
	1	0	0	2	0	0	1	0.57
	2	0	1	1	1	2	1	1.14
	MEAN ± S.D.							**0.90 ± 0.32**
Male	2	1	2	2	3	2	3	2.14
	3	1	0	1	2	1	1	1.29
	1	2	3	3	2	0	2	1.86
	1	1	3	1	1	1	1	1.29
	3	2	3	2	2	4	3	2.71
	1	2	3	2	1	1	4	2.00
	1	0	1	2	2	1	3	1.43
	2	3	4	2	4	1	3	2.71
	2	0	1	1	2	1	1	1.14
	2	3	4	3	3	3	4	3.14
	2	0	1	1	3	1	1	1.29
	1	2	4	2	2	1	1	1.86
	2	2	4	1	2	1	2	2.00
	MEAN ± S.D.							**1.91 ± 0.64**
Female	4	2	4	4	3	2	4	3.29
	3	3	4	4	4	2	3	3.29
	3	3	4	3	2	4	2	3.00
	3	3	4	4	3	2	4	3.29
	3	3	4	4	4	3	4	3.57
	1	3	4	4	4	2	3	3.00
	2	3	4	4	4	2	3	3.24
	3	3	4	4	2	2	4	3.24
	4	3	4	4	4	3	3	3.57
	3	3	4	4	4	3	4	3.57
	3	3	4	2	3	4	3	3.14
	3	2	4	3	4	2	4	3.14
	4	2	4	4	4	3	4	3.14
	MEAN ± S.D.							**3.29 ± 0.22**

Table S2. Number of *C. pavonana* consumed by the nymphs and adults of *S. annulicornis.*

Development stages	Day							Mean
	1	**2**	**3**	**4**	**5**	**6**	**7**	**Mean**
1st instar	0	0	1	1	1	0	1	0.57
	1	1	1	0	0	0	0	0.43
	0	0	1	1	0	0	0	0.29
	1	0	1	1	1	0	1	0.71
	0	0	0	1	1	0	0	0.29
	0	0	0	1	1	1	0	0.43
	1	1	1	1	0	1	1	0.86
	1	1	1	1	0	1	1	0.86
	1	1	1	1	1	0	1	0.86
	1	1	1	1	1	0	1	0.86
	0	1	1	0	1	1	1	0.71
	1	1	1	1	1	0	0	0.71
	0	0	1	1	0	0	1	0.43
	MEAN							**0.62 ± 0.22**
2nd instar	0	1	0	1	0	1	0	0.43
	1	0	1	0	1	0	1	0.57
	1	1	0	1	0	1	0	0.57
	1	1	0	1	0	1	0	0.57
	1	1	0	1	0	1	1	0.71
	1	1	0	1	0	1	0	0.57
	0	1	1	0	1	0	0	0.43
	1	1	0	0	1	0	0	0.43
	1	1	0	1	0	1	1	0.71
	1	1	1	0	1	1	0	0.71
	1	1	0	1	1	0	1	0.71
	1	1	0	1	0	1	1	0.71
	1	1	1	0	1	1	1	0.86
	MEAN							**0.62 ± 0.14**
3rd instar	1	1	0	0	1	1	0	0.57
	1	0	0	1	1	1	1	0.71
	1	0	1	1	0	1	0	0.57
	0	1	1	0	1	1	0	0.57
	1	0	1	0	1	1	0	0.57
	0	1	0	1	1	0	0	0.43
	1	0	1	0	0	1	0	0.43
	0	1	0	0	1	0	1	0.43
	1	1	0	1	1	0	1	0.71
	1	0	1	0	1	1	1	0.71
	1	1	0	1	1	1	1	0.86
	0	1	0	1	1	1	1	0.71
	1	1	1	0	1	1	1	0.86
	MEAN							**0.63 ± 0.15**
4th instar	1	1	0	1	0	1	0	0.57
	1	0	1	1	1	0	1	0.71
	1	0	1	0	1	0	1	0.57
	0	1	0	1	0	0	1	0.43
	1	1	0	1	1	1	0	0.71
	0	1	0	1	0	1	0	0.43
	1	1	1	0	1	1	1	0.86
	1	1	1	1	0	1	0	0.71

Development stages	Day							Mean
	1	**2**	**3**	**4**	**5**	**6**	**7**	
4th instar	1	1	0	1	0	1	1	0.71
	1	0	1	1	0	1	1	0.71
	0	1	0	1	0	1	0	0.43
	1	0	1	0	1	1	1	0.71
	1	1	1	1	1	0	1	0.86
	MEAN							**0.65 ± 0.15**
5th instar	0	1	0	1	0	1	1	0.57
	1	1	1	1	1	1	1	1.00
	1	0	1	0	1	0	1	0.57
	1	1	1	1	0	1	0	0.71
	1	1	1	1	1	1	1	1.00
	1	0	1	0	0	1	0	0.43
	1	1	1	0	1	1	1	0.86
	1	1	1	1	1	1	1	1.00
	1	0	1	1	0	1	0	0.57
	1	1	1	1	1	1	1	1.00
	1	1	1	0	1	1	1	0.86
	1	1	1	1	1	1	1	1.00
	1	1	1	1	1	1	1	1.00
	MEAN							**0.81 ± 0.21**
Male	2	1	2	2	1	2	0	1.43
	2	2	2	3	2	2	1	2.00
	2	2	2	2	1	3	2	2.00
	1	3	2	2	2	2	3	2.14
	3	1	3	0	2	1	1	1.57
	2	2	1	2	1	2	2	1.71
	2	1	2	1	1	1	1	1.29
	1	1	3	0	2	2	2	1.57
	3	2	3	1	2	2	3	2.29
	2	2	1	2	1	2	3	1.86
	1	2	2	1	2	2	1	1.57
	3	2	2	2	2	3	2	2.29
	2	1	3	0	2	2	2	1.71
	MEAN							**1.80 ± 0.32**
Female	3	2	2	3	3	3	4	2.86
	2	2	3	4	3	2	2	2.57
	3	3	3	2	3	3	3	2.86
	3	4	2	4	3	4	3	3.29
	3	2	4	4	3	3	3	3.14
	2	3	3	4	3	3	4	3.14
	3	2	3	2	3	3	2	2.57
	2	3	2	3	2	3	3	2.57
	3	3	2	3	3	3	2	2.71
	3	3	2	4	1	3	2	2.57
	3	4	3	3	3	4	3	3.29
	3	3	3	3	4	3	3	3.14
	2	3	4	3	3	4	3	3.14
	MEAN							**2.91 ± 0.29**

Table S3. Predation ability (number of larvae killed) of nymphs and adults of *S. annulicornis* on *S. asigna* larvae for six continuous days.

Development stages	Replication	Day of observation					
		1	2	3	4	5	6
1st instar	1	0	0	0	0	0	0
	2	0	0	0	0	0	0
	3	0	0	0	0	0	0
	4	0	0	0	0	0	0
	5	0	0	0	0	0	0
	6	0	0	0	0	0	0
2nd instar	1	0	0	0	1	0	1
	2	0	0	0	2	1	0
	3	0	0	0	0	0	1
	4	0	0	0	0	0	1
	5	0	0	0	1	0	1
	6	0	0	0	0	0	1
3rd instar	1	0	0	0	0	0	0
	2	0	0	0	2	1	0
	3	0	0	0	0	0	1
	4	0	0	0	0	0	1
	5	0	0	0	1	0	1
	6	0	0	0	0	0	1
4th instar	1	0	0	0	1	0	0
	2	0	1	1	0	1	0
	3	0	0	1	0	1	0
	4	0	0	1	0	0	1
	5	0	1	1	0	1	0
	6	0	0	0	1	0	0
5th instar	1	0	2	2	0	2	2
	2	1	1	1	3	2	0
	3	1	1	1	2	3	0
	4	0	1	2	1	2	1
	5	0	1	1	1	2	1
	6	1	1	1	2	2	0
Adult	1	1	1	1	1	2	1
	2	0	1	1	1	1	1
	3	1	2	1	1	1	1
	4	0	2	1	1	2	1
	5	1	1	1	2	0	1
	6	0	2	1	1	2	1