

Table Effect of temperature (Tem.) on developmental time (Dev.) of natural enemies¹.

Natural Enemy	Tem.	Dev.	Source	Host or Prey Species
<i>Anisopteromalus calandrae</i> female	15	130	Mobarakian et al. 2014	<i>Callosobruchus maculatus</i>
<i>Anisopteromalus calandrae</i> female	20	40.4	Mobarakian et al. 2014	<i>Callosobruchus maculatus</i>
<i>Anisopteromalus calandrae</i> female	25	20.47	Mobarakian et al. 2014	<i>Callosobruchus maculatus</i>
<i>Anisopteromalus calandrae</i> female	27	17.13	Mobarakian et al. 2014	<i>Callosobruchus maculatus</i>
<i>Anisopteromalus calandrae</i> female	30	14.63	Mobarakian et al. 2014	<i>Callosobruchus maculatus</i>
<i>Anisopteromalus calandrae</i> female	35	12	Mobarakian et al. 2014	<i>Callosobruchus maculatus</i>
<i>Anisopteromalus calandrae</i> female	37	13.33	Mobarakian et al. 2014	<i>Callosobruchus maculatus</i>
<i>Cephalonomia tarsalis</i>	21	26.3	Lukáš and Stejskal 2005	<i>Oryzaephilus surinamensis</i>
<i>Cephalonomia tarsalis</i>	24	16.7	Lukáš and Stejskal 2005	<i>Oryzaephilus surinamensis</i>
<i>Cephalonomia tarsalis</i>	27	11.7	Lukáš and Stejskal 2005	<i>Oryzaephilus surinamensis</i>
<i>Cephalonomia tarsalis</i>	30	11.4	Lukáš and Stejskal 2005	<i>Oryzaephilus surinamensis</i>
<i>Habrobracon hebetor</i>	15	45.7	Golizadeh et al. 2017	<i>Ephestia kuehniella</i>
<i>Habrobracon hebetor</i>	20	18.9	Golizadeh et al. 2017	<i>Ephestia kuehniella</i>
<i>Habrobracon hebetor</i>	25	12.3	Golizadeh et al. 2017	<i>Ephestia kuehniella</i>
<i>Habrobracon hebetor</i>	30	8.1	Golizadeh et al. 2017	<i>Ephestia kuehniella</i>
<i>Habrobracon hebetor</i>	35	7.1	Golizadeh et al. 2017	<i>Ephestia kuehniella</i>
<i>Habrobracon hebetor</i>	16	32.71	Harries 1937	<i>Ephestia kuhniella</i>
<i>Habrobracon hebetor</i>	20	21.21	Harries 1937	<i>Ephestia kuhniella</i>
<i>Habrobracon hebetor</i>	24	13.87	Harries 1937	<i>Ephestia kuhniella</i>
<i>Habrobracon hebetor</i>	26	11.55	Harries 1937	<i>Ephestia kuhniella</i>
<i>Habrobracon hebetor</i>	28	9.89	Harries 1937	<i>Ephestia kuhniella</i>
<i>Habrobracon hebetor</i>	30	8.83	Harries 1937	<i>Ephestia kuhniella</i>
<i>Habrobracon hebetor</i>	32	8.12	Harries 1937	<i>Ephestia kuhniella</i>
<i>Lariophagus distinguendus</i> female	20	31	Ryoo et al. 1991	<i>Sitophilus oryzae</i>
<i>Lariophagus distinguendus</i> female	25	20	Ryoo et al. 1991	<i>Sitophilus oryzae</i>
<i>Lariophagus distinguendus</i> female	28	16	Ryoo et al. 1991	<i>Sitophilus oryzae</i>
<i>Lariophagus distinguendus</i> female	30	14.7	Ryoo et al. 1991	<i>Sitophilus oryzae</i>
<i>Lariophagus distinguendus</i> female	32	14.2	Ryoo et al. 1991	<i>Sitophilus oryzae</i>
<i>Lariophagus distinguendus</i> female	34	15.5	Ryoo et al. 1991	<i>Sitophilus oryzae</i>
<i>Lycotocoris campestris</i> female	17	62.01	Parajulee et al. 1995	<i>Plodia interpunctella</i>
<i>Lycotocoris campestris</i> female	21	39.23	Parajulee et al. 1995	<i>Plodia interpunctella</i>
<i>Lycotocoris campestris</i> female	25	27.28	Parajulee et al. 1995	<i>Plodia interpunctella</i>
<i>Lycotocoris campestris</i> female	29	21.33	Parajulee et al. 1995	<i>Plodia interpunctella</i>
<i>Plastanoxus westwoodi</i> female	15	32.55	Rahman and Islam 2006	<i>Cryptolestes pusillus</i>
<i>Plastanoxus westwoodi</i> female	20	26.13	Rahman and Islam 2006	<i>Cryptolestes pusillus</i>
<i>Plastanoxus westwoodi</i> female	25	17.52	Rahman and Islam 2006	<i>Cryptolestes pusillus</i>
<i>Plastanoxus westwoodi</i> female	30	13.24	Rahman and Islam 2006	<i>Cryptolestes pusillus</i>
<i>Plastanoxus westwoodi</i> female	35	11.21	Rahman and Islam 2006	<i>Cryptolestes pusillus</i>
<i>Theocolax elegans</i> female	20	54.4	Imamura et al. 2004	<i>Sitophilus zeamais</i>
<i>Theocolax elegans</i> female	25	25.7	Imamura et al. 2004	<i>Sitophilus zeamais</i>
<i>Theocolax elegans</i> female	28	19.9	Imamura et al. 2004	<i>Sitophilus zeamais</i>
<i>Theocolax elegans</i> female	30	17.1	Imamura et al. 2004	<i>Sitophilus zeamais</i>
<i>Theocolax elegans</i> female	32	16.2	Imamura et al. 2004	<i>Sitophilus zeamais</i>
<i>Theocolax elegans</i> female	35	18.1	Imamura et al. 2004	<i>Sitophilus zeamais</i>
<i>Venturia canescens</i>	15	104.1	Eliopoulos et al. 2003	<i>Ephestia kuehniella</i>
<i>Venturia canescens</i>	17.5	64.4	Eliopoulos et al. 2003	<i>Ephestia kuehniella</i>

<i>Venturia canescens</i>	20	38.4	Eliopoulos et al. 2003	<i>Ephestia kuehniella</i>
<i>Venturia canescens</i>	25	25	Eliopoulos et al. 2003	<i>Ephestia kuehniella</i>
<i>Venturia canescens</i>	30	20.2	Eliopoulos et al. 2003	<i>Ephestia kuehniella</i>
<i>Venturia canescens</i>	31	18.6	Eliopoulos et al. 2003	<i>Ephestia kuehniella</i>
<i>Venturia canescens</i>	32	19	Eliopoulos et al. 2003	<i>Ephestia kuehniella</i>
<i>Venturia canescens</i>	17.5	53.7	Spanoudis et al. 2012	<i>Plodia interpunctella</i>
<i>Venturia canescens</i>	20	43.9	Spanoudis et al. 2012	<i>Plodia interpunctella</i>
<i>Venturia canescens</i>	22.5	34.2	Spanoudis et al. 2012	<i>Plodia interpunctella</i>
<i>Venturia canescens</i>	25	27.4	Spanoudis et al. 2012	<i>Plodia interpunctella</i>
<i>Venturia canescens</i>	27.5	20.8	Spanoudis et al. 2012	<i>Plodia interpunctella</i>
<i>Venturia canescens</i>	30	23	Spanoudis et al. 2012	<i>Plodia interpunctella</i>
<i>Venturia canescens</i>	32.5	21.8	Spanoudis et al. 2012	<i>Plodia interpunctella</i>
<i>Xylocoris flavipes</i>	20	52	Arbogast 1975	<i>Plodia interpunctella</i>
<i>Xylocoris flavipes</i>	25	24	Arbogast 1975	<i>Plodia interpunctella</i>
<i>Xylocoris flavipes</i>	30	16	Arbogast 1975	<i>Plodia interpunctella</i>
<i>Xylocoris flavipes</i>	35	16	Arbogast 1975	<i>Plodia interpunctella</i>
<i>Xylocoris flavipes</i> female	21	30	Russo et al. 2004	<i>Tribolium castaneum</i>
<i>Xylocoris flavipes</i> female	24	22.2	Russo et al. 2004	<i>Tribolium castaneum</i>
<i>Xylocoris flavipes</i> female	32	23.8	Russo et al. 2004	<i>Tribolium castaneum</i>

1. The developmental times for host or prey can be found in Hagstrum and Subramanyam 2006 (Table 6.1), Hwang et al. 1983 and Throne 1994. Average developmental times between 27.5 and 32.5°C (days in parentheses) are ranked *Oryzaephilus surinamensis* (23.4) < *Cryptolestes ferrugineus* (24.0) < *Callosobruchus maculatus* (25.5) < *Sitophilus oryzae* (28.2) = *Sitophilus zeamais* (28.2) < *Tribolium confusum* (29.0) < *Tribolium castaneum* (29.1) < *Acanthoscelides obtectus* (29.6) < *Lasioderma serricorne* (29.7) < *Cadra calidella* (30.4) < *Cryptolestes pusillus* (33.3) < *Cadra cautella* (35.1) < *Plodia interpunctella* (37.1) < *Corcyra cephalonica* (37.7) < *Ephestia kuehniella* (39.9) < *Rhyzopertha dominica* (42.8) < *Stegobium paniceum* (47.3) < *Cadra figulilella* (47.7).

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