ESMC Best models —Electronic Supplementary materials for chapter 8
Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis* , change when it spread across the globe? A meta-analysis

For each response variable the most parsimonious model within ΔAICc<2
The 20 best models, according to ΔAICc, for each response variable are given on separate sheets

Explanation of letter codes

O = Origin
Ph = Photoperiod
F = Food
S = Strain type
PhO = Origin-Photoperiod
Sex = sexe
T = Temperature
T2 = (Temperature-Tmean)^2
T3 = (Temperature-Tmean)^3
T4 = (Temperature-Tmean)^4
Tmean = mean temperature
p = number of parameters in model
LL = LogLikelihood
AICc = Akaike Information Criterium corrected for small sample sizes
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Development rate

response variable	code response variable	intercept	O	OxT	Ph	PhxT	PhO	PhOxT	F	FxT	S	SxT	Sex	Sex xT	OxPh	OxF	OxS	PhxF	PhxS	FxS	OxSex	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)	# mod ΔAICc < 2	Tmean
DVRE	D0	-0.202707	na	na	na	na	-	-	na	na	**S**	na	-	-	na	na	x	x	x	x	-	0.023	-	-	-	**5**	37.258	-62.894	0	0.360	4	
DVRL1	D1	0.0202418	na	na	**Ph**	**PhxT**	-	-	na	na	na	na	-	-	x	x	na	x	x	na	-	0.014	-	-	-	**8**	32.481	-46.520	0	0.628	2	
DVRL2	D2	-0.389928	**O**	**OxT**	na	na	-	-	na	na	na	na	-	-	x	x	na	x	x	na	-	0.039	-	-	-	**6**	-0.921	15.115	0	0.507	3	
DVRL3	D3	-0.388284	**O**	**OxT**	na	na	-	-	na	na	na	na	-	-	x	x	na	x	x	na	-	0.035	-	-	-	**6**	6.263	0.728	0	1	1	
DVRL4	D4	-0.112135	**O**	**OxT**	na	na	-	-	na	na	na	na	-	-	x	x	na	x	x	na	-	0.013	-	-	-	**6**	82.098	-150.995	0	1	1	
DVRP	D5	-0.14468	na	na	na	na	-	-	na	na	na	na	-	-	x	x	na	x	x	na	-	0.014	-	-	-	**4**	108.652	-208.733	0	0.523	3	
DVRL	D6	-0.058257	**O**	**OxT**	na	na	-	-	na	na	na	na	-	-	x	x	na	x	na	na	-	0.006	-	-	-	**6**	308.215	-603.794	0.282	0.375	3	
DVRLP	D7	-0.011826	na	na	**Ph**	**PhxT**	-	-	na	na	na	na	-	-	x	x	na	x	x	na	-	0.003	-	-	-	**8**	286.023	-554.514	0	0.262	10	
DVRELP	D8	-0.029428	**O**	**OxT**	**Ph**	na	-	-	na	na	na	na	-	-	na	x	x	x	x	na	-	0.004	-	-	-	**8**	242.158	-466.260	1.130	0.568	7	

Survival

SE	S0	0.7039827	na	na	na	na	-	-	**F**	na	**S**	na	-	-	na	na	na	x	na	**FxS**	-	na	-0.003	-0.000362	na	8	-121.167	259.953	0	0.196	8	23.85
SL1	S1	0.9589344	-	-	-	-	na	na	-	-	na	na	-	-	x	x	x	x	x	-	-	na	-0.003	-0.000129	na	5	5.768	3.080	0	1	1	24.21
SL2	S2	0.9977448	-	-	-	-	na	na	-	-	na	na	-	-	x	x	x	x	x	-	-	na	0.000	na	na	4	32.769	-55.038	0	0.563	2	24.43
SL3	S3	1.0278772	-	-	-	-	**PhO**	**PhOxT**	-	-	na	na	-	-	x	x	x	x	x	-	-	-0.001	-0.001	na	na	9	35.571	-38.142	0	1	1	24.41
SL4	S4	0.9570912	-	-	-	-	na	na	-	-	na	na	-	-	x	x	x	x	x	-	-	na	0.004	-0.000153	-0.000076	6	2.543	12.165	0	1	1	24.30
SP	S5	0.9853614	-	-	-	-	na	na	-	-	na	na	-	-	x	x	x	x	x	-	-	na	na	-0.000324	-0.000043	5	3.190	7.150	1.303	0.250	3	24.48
SL	S6	0.9021193	na	na	na	na	-	-	**F**	**FxT**	na	na	-	-	na	x	na	x	na	na		0.002	-0.005	-0.0002	na	8	-4.966	30.431	1.227	0.070	13	24.46
SLP	S7	0.7250142	**O**	na	**Ph**	na	-	-	na	na	na	na	-	-	**OxPh**	x	na	na	na	x	-	na	na	-0.000181646	-5.41675E-05	8	2.080	16.806	0.000	0.660	2	24.38
SELP	S8	1.374265	na	na	**Ph**	x	-	-	na	na	na	na	-	-	x	x	na	x	x	x	-	-0.023	-0.005	na	na	6	-5.652	27.304	0	0.245	7	24.18

Adult

PO	A1	-0.05614	na	na	**Ph**	**PhxT**	-	-	**F**	**FxT**	**S**	**SxT**	-	-	na	x	na	x	x	**FxS**	-	0.007	-	-	-	13	129.195	-227.038	1.268	0.347	2	
Gtime	A2	-0.005162	na	na	**Ph**	**PhxT**	-	-	na	na	**S**	na	-	-	x	x	x	x	x	na	-	0.002	-	-	-	9	187.270	-353.011	1.610	0.164	5	
Fec	A3	70.728244	**O**	**OxT**	na	na	-	-	**F**	**FxT**	na	na	-	-	na	x	na	x	x	na	-	-2.049	-0.186	-	-	9	-281.904	584.665	0	0.099	15	23.60959
Long	A4	198.64595	**O**	na	na	na	-	-	na	na	**S**	na	na	na	x	x	x	x	x	na	na	-3.736	-	-	-	6	-244.781	503.661	0.737	0.144	8	

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Develpment rate Egg (D0)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
x= factor excluded from most complex model due to dependency of explaining variables
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Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxPH	OxF	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
-0.203	**na**	**na**	**na**	**na**	**na**	**na**	**S**	**na**	**na**	**na**	**0.023**	**5**	**37.258**	**-62.894**	**0.000**	**0.360**
-0.239	O	na	na	na	na	na	na	na	na	na	0.023	5	37.210	-62.799	0.095	0.343
-0.207	na	na	na	na	F	na	S	na	na	na	0.023	6	37.753	-61.173	1.720	0.152
-0.221	O	na	na	na	na	na	S	na	na	na	0.022	6	37.698	-61.063	1.831	0.144
-0.244	O	na	na	na	F	na	na	na	na	na	0.023	6	37.571	-60.808	2.085	
-0.205	na	na	na	na	na	na	S	SxT	na	na	0.023	6	37.262	-60.190	2.704	
-0.237	O	OxT	na	na	na	na	na	na	na	na	0.023	6	37.214	-60.095	2.799	
-0.202	na	na	na	na	F	FxT	S	na	na	na	0.022	7	38.511	-59.822	3.072	
-0.226	na	na	na	na	na	na	na	na	na	na	0.023	4	34.355	-59.658	3.235	
-0.236	O	na	na	na	F	FxT	na	na	na	na	0.022	7	38.262	-59.324	3.570	
-0.225	O	na	na	na	F	na	S	na	na	na	0.023	7	38.249	-59.298	3.596	
-0.207	na	na	na	na	F	na	S	SxT	na	na	0.023	7	37.754	-58.307	4.586	
-0.214	O	OxT	na	na	na	na	S	na	na	na	0.022	7	37.724	-58.249	4.645	
-0.219	O	na	na	na	na	na	S	SxT	na	na	0.022	7	37.700	-58.201	4.693	
-0.240	O	na	Ph	na	na	na	na	na	na	na	0.023	7	37.636	-58.072	4.822	
-0.246	O	OxT	na	na	F	na	na	na	na	na	0.023	7	37.572	-57.945	4.949	
-0.244	O	na	na	na	F	na	na	na	na	OxF	0.023	7	37.571	-57.942	4.951	
-0.198	na	na	Ph	na	na	na	S	na	na	na	0.023	7	37.384	-57.568	5.325	
-0.218	O	na	na	na	F	FxT	S	na	na	na	0.022	8	38.860	-57.484	5.409	
-0.218	na	na	na	na	F	FxT	na	na	na	na	0.023	6	35.862	-57.391	5.503	

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Develpment rate L1 (D1)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature

p=number of parameters in model
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intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxS	FxS	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
0.020	**na**	**na**	**Ph**	**PhxT**	**na**	**na**	**na**	**na**	**na**	**na**	**0.014**	**8**	**32.481**	**-46.520**	**0.000**	**1.000**
0.009	na	na	Ph	PhxT	na	na	S	na	na	na	0.014	9	33.287	-45.470	1.050	0.591
0.033	O	na	Ph	PhxT	na	na	na	na	na	na	0.014	9	32.715	-44.327	2.194	
0.011	na	na	Ph	PhxT	na	na	S	SxT	na	na	0.014	10	33.970	-44.081	2.440	
0.020	na	na	Ph	PhxT	F	na	na	na	na	na	0.014	9	32.500	-43.896	2.624	
-0.243	O	OxT	na	na	na	na	na	na	na	na	0.027	6	28.526	-43.674	2.846	
0.008	na	na	Ph	PhxT	F	na	S	na	na	na	0.014	10	33.309	-42.758	3.763	
0.012	O	na	Ph	PhxT	na	na	S	na	na	na	0.014	10	33.299	-42.737	3.783	
-0.259	O	OxT	na	na	na	na	S	na	na	na	0.027	7	28.884	-41.901	4.620	
-0.094	O	OxT	Ph	PhxT	na	na	na	na	na	na	0.019	10	32.840	-41.820	4.700	
0.033	O	na	Ph	PhxT	F	na	na	na	na	na	0.014	10	32.716	-41.571	4.949	
0.020	na	na	Ph	PhxT	F	FxT	na	na	na	na	0.014	10	32.627	-41.395	5.125	
0.011	na	na	Ph	PhxT	F	na	S	SxT	na	na	0.014	11	33.988	-41.261	5.259	
0.014	O	na	Ph	PhxT	na	na	S	SxT	na	na	0.014	11	33.977	-41.240	5.281	
-0.243	O	OxT	na	na	F	na	na	na	na	na	0.027	7	28.527	-41.187	5.334	
0.000	O	na	Ph	PhxT	na	na	S	na	OxS	na	0.014	11	33.598	-40.482	6.038	
-0.210	O	OxT	na	na	na	na	S	SxT	na	na	0.025	8	29.449	-40.457	6.063	
0.008	na	na	Ph	PhxT	F	FxT	S	na	na	na	0.014	11	33.451	-40.187	6.333	
0.007	na	na	Ph	PhxT	F	na	S	na	na	FxS	0.014	11	33.445	-40.175	6.346	
-0.087	O	OxT	Ph	PhxT	na	na	S	na	na	na	0.018	11	33.379	-40.043	6.477	

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Develpment rate L2 (D2)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
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T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
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intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxS	FxS	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
-0.390	**O**	**OxT**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**0.039**	**6**	**-0.921**	**15.115**	**0.000**	**0.507**
-0.828	O	OxT	Ph	PhxT	na	na	na	na	na	na	0.055	10	3.564	16.420	1.305	0.264
-0.393	O	OxT	na	na	F	FxT	na	na	na	na	0.039	8	0.770	16.710	1.595	0.229
-0.430	O	OxT	Ph	na	na	na	na	na	na	na	0.039	8	0.477	17.295	2.180	
-0.395	O	OxT	na	na	F	na	na	na	na	na	0.039	7	-0.824	17.371	2.256	
-0.400	O	OxT	na	na	na	na	S	na	na	na	0.039	7	-0.892	17.508	2.393	
-0.832	O	OxT	Ph	PhxT	F	FxT	na	na	na	na	0.055	12	5.367	18.465	3.350	
-0.434	O	OxT	Ph	na	F	FxT	na	na	na	na	0.039	10	2.323	18.902	3.787	
-0.419	O	OxT	na	na	F	FxT	S	na	na	na	0.039	9	0.962	18.932	3.817	
-0.867	O	OxT	Ph	PhxT	na	na	S	na	na	na	0.055	11	3.687	18.955	3.840	
-0.833	O	OxT	Ph	PhxT	F	na	na	na	na	na	0.055	11	3.663	19.002	3.887	
-0.362	O	OxT	na	na	na	na	S	SxT	na	na	0.038	8	-0.653	19.556	4.441	
-0.471	O	OxT	Ph	na	na	na	S	na	na	na	0.039	9	0.616	19.625	4.510	
-0.436	O	OxT	Ph	na	F	na	na	na	na	na	0.039	9	0.587	19.684	4.569	
-0.134	na	na	Ph	PhxT	na	na	na	na	na	na	0.026	8	-0.757	19.764	4.649	
-0.407	O	OxT	na	na	F	na	S	na	na	na	0.039	8	-0.789	19.827	4.713	
-0.406	O	OxT	na	na	na	na	S	na	OxS	na	0.039	8	-0.863	19.976	4.861	
-0.903	O	OxT	Ph	PhxT	F	FxT	S	na	na	na	0.055	13	5.804	20.561	5.446	
-0.506	O	OxT	Ph	na	F	FxT	S	na	na	na	0.039	11	2.789	20.749	5.634	
-0.200	na	na	na	na	na	na	S	SxT	na	na	0.031	6	-3.753	20.778	5.663	

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Develpment rate L3 (D3)

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intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxS	FxS	T	p	LL	AICc	ΔAICc	AICc weights (ΔAICc < 2)
-0.388	**O**	**OxT**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**0.035**	**6**	**6.263**	**0.728**	**0.000**	**1.000**
-0.402	O	OxT	na	na	na	na	S	na	na	na	0.035	7	6.372	2.954	2.226	
-0.384	O	OxT	na	na	F	na	na	na	na	na	0.035	7	6.353	2.990	2.262	
-0.384	O	OxT	Ph	na	na	na	na	na	na	na	0.035	8	6.902	4.411	3.683	
-0.340	O	OxT	na	na	na	na	S	SxT	na	na	0.032	8	6.856	4.503	3.775	
-0.180	na	na	na	na	na	na	S	SxT	na	na	0.026	6	4.175	4.904	4.176	
-0.396	O	OxT	na	na	na	na	S	na	OxS	na	0.035	8	6.486	5.243	4.515	
-0.398	O	OxT	na	na	F	na	S	na	na	na	0.035	8	6.444	5.327	4.599	
-0.384	O	OxT	na	na	F	FxT	na	na	na	na	0.035	8	6.354	5.508	4.780	
-0.255	na	na	na	na	na	na	na	na	na	na	0.029	4	0.993	6.594	5.867	
-0.412	O	OxT	Ph	na	na	na	S	na	na	na	0.035	9	7.070	6.672	5.944	
-0.328	O	OxT	na	na	na	na	S	SxT	OxS	na	0.032	9	7.018	6.777	6.050	
-0.084	na	na	Ph	PhxT	na	na	na	na	na	na	0.021	8	5.715	6.785	6.057	
-0.380	O	OxT	Ph	na	F	na	na	na	na	na	0.035	9	6.993	6.826	6.099	
-0.334	O	OxT	na	na	F	na	S	SxT	na	na	0.032	9	6.937	6.939	6.212	
-0.179	na	na	na	na	F	na	S	SxT	na	na	0.026	7	4.225	7.247	6.519	
-0.179	O	na	na	na	na	na	S	SxT	na	na	0.026	7	4.175	7.346	6.619	
-0.394	O	OxT	na	na	F	na	S	na	na	FxS	0.035	9	6.584	7.644	6.916	
-0.390	O	OxT	na	na	F	na	S	na	OxS	na	0.035	9	6.568	7.676	6.949	
-0.398	O	OxT	na	na	F	FxT	S	na	na	na	0.035	9	6.448	7.917	7.189	

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Develpment rate L4 (D4)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
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intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxS	FxS	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
-0.112	**O**	**Oxt**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**0.013**	**6**	**82.098**	**-150.995**	**0.000**	**1.000**
-0.107	O	Oxt	na	na	na	na	S	na	na	na	0.013	7	82.215	-148.807	2.188	
-0.113	O	Oxt	na	na	F	na	na	na	na	na	0.013	7	82.136	-148.649	2.346	
-0.086	O	Oxt	na	na	na	na	S	SxT	na	na	0.013	8	82.667	-147.215	3.780	
-0.103	O	Oxt	na	na	na	na	S	na	OxS	na	0.013	8	82.387	-146.655	4.340	
-0.125	O	Oxt	P	na	na	na	na	na	na	na	0.013	8	82.342	-146.566	4.429	
-0.021	na	na	na	na	na	na	S	SxT	na	na	0.010	6	79.836	-146.472	4.523	
-0.108	O	Oxt	na	na	F	na	S	na	na	na	0.013	8	82.246	-146.375	4.620	
-0.113	O	Oxt	na	na	F	FxT	na	na	na	na	0.013	8	82.139	-146.160	4.835	
-0.082	O	Oxt	na	na	na	na	S	SxT	OxS	na	0.013	9	82.881	-145.075	5.920	
-0.087	O	Oxt	na	na	F	na	S	SxT	na	na	0.013	9	82.696	-144.705	6.290	
-0.119	O	Oxt	P	na	na	na	S	na	na	na	0.013	9	82.453	-144.220	6.775	
-0.105	O	Oxt	na	na	F	na	S	na	OxS	na	0.013	9	82.415	-144.142	6.853	
-0.024	O	na	na	na	na	na	S	SxT	na	na	0.010	7	79.871	-144.118	6.877	
-0.021	na	na	na	na	F	na	S	SxT	na	na	0.010	7	79.861	-144.099	6.896	
-0.126	O	Oxt	P	na	F	na	na	na	na	na	0.013	9	82.375	-144.064	6.931	
-0.108	O	Oxt	na	na	F	na	S	na	na	FxS	0.013	9	82.264	-143.842	7.153	
-0.108	O	Oxt	na	na	F	FxT	S	na	na	na	0.013	9	82.256	-143.826	7.169	
-0.049	na	na	na	na	na	na	na	na	na	na	0.011	4	75.999	-143.443	7.552	
-0.009	na	na	P	P	na	na	na	na	na	na	0.009	8	80.647	-143.177	7.818	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis
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Develpment rate Pupa (D5)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
x= factor excluded from most complex model due to dependency of explaining variables
- =factor not included in formation of most complex model, because factors are combined or not varying
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxS	FxS	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
-0.145	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**0.014**	**4**	**108.652**	**-208.733**	**0.000**	**0.523**
-0.144	na	na	na	na	F	na	na	na	na	na	0.014	5	109.152	-207.434	1.299	0.273
0.004	O	OxT	Ph	PhxT	na	na	na	na	na	na	0.006	10	115.146	-206.855	1.878	0.204
-0.147	O	na	na	na	na	na	na	na	na	na	0.014	5	108.752	-206.634	2.099	
-0.143	na	na	na	na	na	na	S	na	na	na	0.014	5	108.689	-206.508	2.225	
-0.119	na	na	Ph	PhxT	na	na	na	na	na	na	0.012	8	111.889	-205.596	3.137	
-0.145	O	na	na	na	F	na	na	na	na	na	0.014	6	109.166	-205.096	3.637	
-0.154	na	na	Ph	na	na	na	na	na	na	na	0.014	6	109.165	-205.095	3.638	
-0.143	na	na	Ph	na	F	na	S	na	na	na	0.014	6	109.163	-205.090	3.643	
-0.144	na	na	na	na	F	FxT	na	na	na	na	0.014	6	109.159	-205.083	3.651	
-0.137	na	na	na	na	na	na	S	SxT	na	na	0.014	6	109.035	-204.834	3.899	
0.004	O	OxT	Ph	PhxT	F	na	na	na	na	na	0.006	11	115.493	-204.796	3.938	
0.004	O	OxT	Ph	PhxT	na	na	S	na	na	na	0.006	11	115.458	-204.726	4.007	
-0.153	O	OxT	na	na	na	na	na	na	na	na	0.014	6	108.880	-204.525	4.208	
-0.147	O	na	na	na	na	na	S	na	na	na	0.014	6	108.755	-204.275	4.458	
-0.119	na	na	Ph	PhxT	F	na	na	na	na	na	0.012	9	112.458	-204.147	4.586	
-0.154	na	na	Ph	na	F	na	na	na	na	na	0.014	7	109.736	-203.800	4.933	
-0.137	na	na	na	na	F	na	S	SxT	na	na	0.014	7	109.526	-203.381	5.352	
-0.123	O	na	Ph	PhxT	na	na	na	na	na	na	0.012	9	112.022	-203.275	5.459	
-0.144	na	na	na	na	F	na	S	na	na	FxS	0.014	7	109.341	-203.010	5.723	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis

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Develpment rate Larva (D6)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
x= factor excluded from most complex model due to dependency of explaining variables
- =factor not included in formation of most complex model, because factors are combined or not varying
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxS	PhxS	FxS	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
-0.007	na	na	Ph	PhxT	na	na	na	na	na	na	na	0.004	8	310.592	-604.076	0.000	0.432
-0.058	**O**	**OxT**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**0.006**	**6**	**308.215**	**-603.794**	**0.282**	**0.375**
-0.048	O	OxT	Ph	PhxT	na	na	na	na	na	na	na	0.006	10	312.094	-602.469	1.607	0.193
-0.007	na	na	Ph	PhxT	F	na	na	na	na	na	na	0.004	9	310.698	-602.001	2.075	
-0.007	na	na	Ph	PhxT	na	na	S	na	na	na	na	0.004	9	310.617	-601.838	2.238	
-0.006	O	na	Ph	PhxT	na	na	na	na	na	na	na	0.004	9	310.606	-601.817	2.259	
-0.006	na	na	Ph	PhxT	na	na	S	SxT	na	na	na	0.004	10	311.751	-601.784	2.292	
-0.059	O	OxT	na	na	F	na	na	na	na	na	na	0.006	7	308.303	-601.751	2.325	
-0.058	O	OxT	na	na	na	na	S	na	na	na	na	0.006	7	308.240	-601.625	2.451	
-0.049	O	OxT	na	na	na	na	S	SxT	na	na	na	0.006	8	308.955	-600.803	3.273	
-0.058	O	OxT	Ph	na	na	na	na	na	na	na	na	0.006	8	308.848	-600.588	3.488	
-0.048	O	OxT	Ph	PhxT	F	na	na	na	na	na	na	0.006	11	312.167	-600.255	3.821	
-0.048	O	OxT	Ph	PhxT	na	na	S	na	na	na	na	0.006	11	312.108	-600.138	3.938	
-0.008	na	na	Ph	PhxT	F	na	S	na	na	na	na	0.004	10	310.713	-599.707	4.369	
-0.007	na	na	Ph	PhxT	F	FxT	na	na	na	na	na	0.004	10	310.700	-599.680	4.395	
-0.007	O	na	Ph	PhxT	F	na	na	na	na	na	na	0.004	10	310.699	-599.678	4.397	
-0.006	na	na	Ph	PhxT	F	na	S	SxT	na	na	na	0.004	11	311.832	-599.586	4.490	
-0.058	O	OxT	na	na	F	na	S	na	na	na	na	0.006	8	308.328	-599.549	4.527	
-0.007	O	na	Ph	PhxT	na	na	S	na	na	na	na	0.004	10	310.621	-599.522	4.553	
-0.059	O	OxT	na	na	F	FxT	na	na	na	na	na	0.006	8	308.306	-599.504	4.572	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis
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Develpment rate Larva + Pupa (D7)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
x= factor excluded from most complex model due to dependency of explaining variables
- =factor not included in formation of most complex model, because factors are combined or not varying
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxS	FxS	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
-0.012	**na**	**na**	**Ph**	**PhxT**	**na**	**na**	**na**	**na**	**na**	**na**	**0.003**	**8**	**286.023**	**-554.514**	**0.000**	**0.262**
-0.011	na	na	Ph	PhxT	F	FxT	na	na	na	na	0.003	10	288.375	-554.359	0.155	0.242
-0.034	O	OxT	Ph	na	na	na	na	na	na	na	0.004	8	285.579	-553.626	0.888	0.168
-0.009	na	na	Ph	PhxT	F	FxT	S	SxT	na	na	0.003	12	290.530	-553.592	0.922	0.165
-0.009	na	na	Ph	PhxT	na	na	S	SxT	na	na	0.003	10	287.974	-553.557	0.957	0.162
-0.033	O	OxT	Ph	na	F	FxT	na	na	na	na	0.004	10	287.878	-553.364	1.150	0.147
-0.023	O	OxT	Ph	PhxT	na	na	na	na	na	na	0.004	10	287.731	-553.072	1.443	0.127
-0.021	O	OxT	Ph	PhxT	F	FxT	na	na	na	na	0.004	12	290.082	-552.698	1.817	0.106
-0.010	O	na	Ph	PhxT	F	FxT	na	na	na	na	0.003	11	288.763	-552.625	1.889	0.102
-0.011	O	na	Ph	PhxT	na	na	na	na	na	na	0.003	9	286.258	-552.580	1.934	0.100
-0.012	na	na	Ph	PhxT	F	FxT	S	na	na	na	0.003	11	288.689	-552.477	2.037	
-0.012	na	na	Ph	PhxT	na	na	S	na	na	na	0.003	9	286.049	-552.162	2.353	
-0.012	na	na	Ph	PhxT	F	na	na	na	na	na	0.003	9	286.032	-552.128	2.386	
-0.008	O	na	Ph	PhxT	F	FxT	S	SxT	na	na	0.003	13	290.833	-551.577	2.937	
-0.008	O	na	Ph	PhxT	na	na	S	SxT	na	na	0.003	11	288.227	-551.553	2.961	
-0.034	O	OxT	Ph	na	na	na	S	na	na	na	0.004	9	285.605	-551.274	3.240	
-0.034	O	OxT	Ph	na	F	na	na	na	na	na	0.004	9	285.584	-551.232	3.283	
-0.009	na	na	Ph	PhxT	F	na	S	SxT	na	na	0.003	11	287.980	-551.058	3.456	
-0.009	na	na	Ph	PhxT	F	FxT	S	SxT	na	FxS	0.003	13	290.537	-550.984	3.530	
-0.033	O	OxT	Ph	na	F	FxT	S	na	na	na	0.004	11	287.909	-550.917	3.597	

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Develpment rate Egg to Adult (D8)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
x= factor excluded from most complex model due to dependency of explaining variables
- =factor not included in formation of most complex model, because factors are combined or not varying
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxPh	FxS	T	P	LL	AICc	ΔAICc	AICc wei (ΔAICc < 2)
-0.012	+	na	+	+	na	na	na	na	na	na	0.003	9	243.999	-467.389	0.000	1.000
-0.029	+	+	+	na	na	na	na	na	+	na	0.004	10	244.881	-466.527	0.862	0.650
-0.029	**+**	**+**	**+**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**0.004**	**8**	**242.158**	**-466.260**	**1.130**	**0.568**
-0.012	+	na	+	+	+	na	na	na	na	na	0.003	10	244.570	-465.905	1.484	0.476
-0.013	na	na	+	+	na	na	na	na	na	na	0.003	8	241.956	-465.856	1.534	0.465
-0.012	+	na	+	+	+	+	na	na	na	na	0.003	11	245.892	-465.844	1.545	0.462
-0.030	+	+	+	na	+	na	na	na	+	na	0.004	11	245.715	-465.489	1.900	0.387
-0.016	+	+	+	+	na	na	na	na	na	na	0.003	10	244.222	-465.209	2.180	
-0.013	na	na	+	+	+	na	na	na	na	na	0.003	9	242.892	-465.174	2.215	
-0.030	+	+	+	na	+	na	na	na	na	na	0.004	9	242.853	-465.097	2.292	
-0.012	+	na	+	+	na	na	+	na	na	na	0.003	10	244.074	-464.914	2.476	
-0.014	na	na	+	+	+	+	na	na	na	na	0.003	10	244.028	-464.820	2.569	
-0.012	+	na	+	+	na	na	na	na	+	na	0.003	11	245.317	-464.694	2.695	
-0.029	+	+	+	na	na	na	+	na	+	na	0.004	11	244.994	-464.048	3.342	
-0.032	+	+	+	na	+	+	na	na	+	na	0.004	12	246.368	-464.009	3.381	
-0.030	+	+	+	na	na	na	+	na	na	na	0.004	9	242.303	-463.997	3.393	
-0.013	na	na	+	+	na	na	+	na	na	na	0.003	9	242.263	-463.918	3.471	
-0.032	+	+	+	na	+	+	na	na	na	na	0.004	10	243.514	-463.794	3.596	
-0.017	+	+	+	+	+	na	na	na	na	na	0.003	11	244.830	-463.719	3.671	
-0.017	+	+	+	+	+	+	na	na	na	na	0.003	12	246.216	-463.705	3.684	

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Survival Egg (S0)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature=23.85204

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxPh	OxF	OxS	PhxS	FxS	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
0.704	**na**	**na**	**na**	**na**	**F**	**na**	**S**	**na**	**na**	**na**	**na**	**na**	**FxS**	**na**	**-0.003**	**-0.00036**	**na**	**8**	**-121.167**	**259.953**	**0.000**	**0.196**
0.693	O	na	Ph	na	F	na	S	na	na	OxF	na	PhxS	FxS	na	na	-0.00032	-0.00002	14	-113.765	260.591	0.638	0.142
0.689	na	na	na	na	F	na	S	na	na	na	na	na	FxS	na	na	-0.00033	-0.00002	8	-121.569	260.755	0.802	0.131
0.649	O	na	na	na	F	na	S	na	na	na	na	na	FxS	na	-0.003	-0.00036	na	9	-120.370	260.786	0.833	0.129
0.707	O	na	Ph	na	F	na	S	na	na	OxF	na	PhxS	FxS	na	-0.002	-0.00035	na	14	-114.000	261.061	1.108	0.112
0.630	O	na	na	na	F	na	S	na	na	na	na	na	FxS	na	na	-0.00033	-0.00002	9	-120.586	261.218	1.266	0.104
0.632	O	na	na	na	F	na	S	na	na	OxF	na	na	FxS	na	-0.002	-0.00036	na	10	-119.378	261.285	1.332	0.101
0.613	O	na	na	na	F	na	S	na	na	OxF	na	na	FxS	na	na	-0.00033	-0.00002	10	-119.551	261.630	1.677	0.085
0.738	O	na	Ph	na	F	na	S	na	na	na	na	PhxS	FxS	na	na	-0.00032	-0.00002	13	-115.919	262.172	2.219	
0.667	O	na	Ph	na	F	na	S	na	na	OxF	OxS	PhxS	FxS	na	na	-0.00031	-0.00002	15	-113.221	262.296	2.344	
0.773	na	na	na	na	F	na	S	na	na	na	na	na	FxS	-0.003	-0.003	-0.00033	na	9	-121.129	262.303	2.350	
0.752	O	na	Ph	na	F	na	S	na	na	na	na	PhxS	FxS	na	-0.002	-0.00036	na	13	-115.989	262.311	2.358	
0.702	na	na	na	na	F	na	S	na	na	na	na	na	FxS	na	-0.002	-0.00036	0.00000	9	-121.156	262.357	2.404	
0.726	O	na	Ph	na	F	na	S	na	na	OxF	na	na	FxS	na	na	-0.00032	-0.00002	12	-117.418	262.507	2.555	
0.850	na	na	Ph	na	F	na	S	na	na	na	na	na	FxS	na	-0.003	-0.00036	na	10	-120.042	262.612	2.659	
0.679	O	na	Ph	na	F	na	S	na	na	OxF	OxS	PhxS	FxS	na	-0.002	-0.00035	na	15	-113.383	262.620	2.667	
0.426	na	na	na	na	F	FxT	S	na	na	na	na	na	FxS	0.012	-0.002	-0.00047	na	10	-120.094	262.716	2.763	
0.762	O	na	Ph	na	F	na	S	na	na	na	na	na	FxS	na	na	-0.00033	-0.00002	11	-118.874	262.817	2.864	
0.742	O	na	Ph	na	F	na	S	na	na	OxF	na	na	FxS	na	-0.002	-0.00036	na	12	-117.577	262.824	2.871	
0.777	O	na	Ph	na	F	na	S	na	na	na	na	na	FxS	na	-0.003	-0.00036	na	11	-118.916	262.902	2.950	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis
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Survival L1 (S1)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature=24.21053

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

Intercept	PhO	PhOxT	S	SxT	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
0.959	**na**	**na**	**na**	**na**	**na**	**-0.003**	**-0.00013**	**na**	**5**	**5.768**	**3.080**	**0.000**	**1.000**
0.931	na	na	na	na	na	na	-0.00011	-0.00002	5	4.651	5.313	2.233	
1.222	na	na	na	na	-0.011	-0.003	na	na	5	4.409	5.797	2.718	
1.162	na	na	na	na	-0.009	na	na	-0.00003	5	4.127	6.362	3.282	
0.954	na	na	na	na	na	-0.002	-0.00013	-0.00001	6	5.857	7.285	4.205	
1.013	na	na	na	na	-0.002	-0.003	-0.00011	na	6	5.857	7.287	4.207	
0.956	na	na	S	na	na	-0.003	-0.00013	na	6	5.853	7.294	4.214	
0.926	na	na	S	na	na	na	-0.00011	-0.00002	6	4.892	9.216	6.137	
1.011	na	na	na	na	-0.003	na	-0.00008	-0.00002	6	4.827	9.347	6.267	
1.196	na	na	na	na	-0.010	-0.002	na	-0.00001	6	4.798	9.404	6.324	
1.221	na	na	S	na	-0.011	-0.003	na	na	6	4.412	10.176	7.096	
1.158	na	na	S	na	-0.009	na	na	-0.00003	6	4.208	10.585	7.505	
0.978	PhO	na	na	na	na	-0.003	-0.00013	na	7	6.008	12.166	9.086	
1.015	na	na	na	na	-0.003	-0.002	-0.00010	-0.00001	7	5.974	12.233	9.153	
0.950	na	na	S	na	na	-0.002	-0.00013	-0.00001	7	5.967	12.248	9.168	
1.003	na	na	S	na	-0.002	-0.003	-0.00011	na	7	5.919	12.344	9.265	
0.970	PhO	na	na	na	na	na	-0.00011	-0.00002	7	5.139	13.903	10.824	
0.994	na	na	S	na	-0.003	na	-0.00008	-0.00002	7	5.014	14.153	11.073	
1.193	na	na	S	na	-0.010	-0.002	na	-0.00001	7	4.818	14.546	11.466	
1.165	na	na	S	SxT	-0.010	na	na	-0.00003	7	4.760	14.662	11.582	

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Survival L2 (S2)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature=24.42857

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

Intercept	PhO	PhOxT	S	SxT	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
0.998	**na**	**na**	**na**	**na**	**na**	**-0.0005**	**na**	**na**	**4**	**32.769**	**-55.038**	**0.000**	**0.563**
0.993	na	na	na	na	na	na	na	-0.000004	4	32.514	-54.529	0.509	0.437
0.998	na	na	na	na	na	-0.0005	0.00001	na	5	33.080	-52.160	2.878	
0.993	na	na	na	na	na	na	0.00001	-0.000004	5	33.040	-52.079	2.959	
1.000	na	na	S	na	na	-0.0005	na	na	5	33.004	-52.008	3.030	
0.996	na	na	na	na	na	-0.0003	na	-0.000002	5	32.865	-51.730	3.308	
0.994	na	na	na	na	0.0002	-0.0005	na	na	5	32.807	-51.614	3.424	
0.986	na	na	na	na	0.0003	na	na	-0.000004	5	32.635	-51.271	3.767	
0.985	PhO	na	na	na	na	-0.0005	na	na	6	34.615	-51.230	3.808	
0.994	na	na	S	na	na	na	na	-0.000004	5	32.580	-51.160	3.878	
0.752	PhO	PhOxT	na	na	0.0099	na	na	-0.000005	9	42.439	-50.515	4.523	
0.983	PhO	na	na	na	na	na	na	-0.000005	6	33.973	-49.946	5.091	
1.040	na	na	na	na	-0.0017	-0.0005	0.00002	na	6	33.770	-49.541	5.497	
1.035	na	na	na	na	-0.0017	na	0.00002	-0.000005	6	33.735	-49.470	5.568	
1.000	na	na	S	na	na	-0.0005	0.00001	na	6	33.329	-48.658	6.379	
0.996	na	na	na	na	na	-0.0003	0.00001	-0.000002	6	33.271	-48.543	6.495	
0.994	na	na	S	na	na	na	0.00001	-0.000005	6	33.114	-48.229	6.809	
0.998	na	na	S	na	na	-0.0004	na	-0.000001	6	33.052	-48.105	6.933	
0.996	na	na	S	na	0.0002	-0.0005	na	na	6	33.042	-48.083	6.955	
0.991	na	na	na	na	0.0002	-0.0003	na	-0.000002	6	32.931	-47.861	7.177	

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Survival L3 (S3)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature=24.40909

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

Intercept	PhO	PhOxT	S	SxT	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
1.028	**PhO**	**PhOxT**	**na**	**na**	**-0.0011**	**-0.0006**	**na**	**na**	**9**	**35.571**	**-38.142**	**0.000**	**1.000**
1.001	PhO	PhOxT	na	na	-0.0001	na	na	-0.000005	9	33.998	-34.996	3.145	
1.029	PhO	PhOxT	na	na	-0.0011	-0.0006	0.00001	na	10	35.652	-31.304	6.838	
1.032	PhO	PhOxT	na	na	-0.0013	-0.0007	na	0.000001	10	35.606	-31.212	6.929	
1.028	PhO	PhOxT	S	na	-0.0011	-0.0006	na	na	10	35.572	-31.144	6.998	
1.002	PhO	PhOxT	na	na	-0.0001	na	0.00001	-0.000005	10	34.099	-28.199	9.943	
1.001	PhO	PhOxT	S	na	-0.0001	na	na	-0.000005	10	34.076	-28.152	9.989	
1.001	na	na	na	na	na	-0.0005	na	na	4	19.183	-28.014	10.128	
1.002	na	na	na	na	na	-0.0005	0.00002	na	5	20.221	-26.692	11.450	
1.010	na	na	na	na	na	-0.0015	na	0.000009	5	20.190	-26.630	11.511	
0.966	na	na	na	na	0.0014	-0.0005	na	na	5	19.977	-26.205	11.937	
0.995	na	na	na	na	na	na	na	-0.000004	4	18.219	-26.086	12.056	
0.996	na	na	na	na	na	na	0.00002	-0.000004	5	19.278	-24.805	13.337	
1.001	na	na	S	na	na	-0.0005	na	na	5	19.189	-24.628	13.514	
0.984	na	na	na	na	na	na	na	na	3	15.943	-24.552	13.589	
0.958	na	na	na	na	0.0015	na	na	-0.000004	5	19.046	-24.342	13.799	
1.009	na	na	na	na	na	-0.0013	0.00002	0.000008	6	20.918	-24.235	13.906	
0.980	na	na	na	na	0.0012	-0.0013	na	0.000008	6	20.739	-23.878	14.264	
1.033	PhO	PhOxT	na	na	-0.0013	-0.0007	0.00001	0.000001	11	35.680	-22.960	15.181	
1.029	PhO	PhOxT	S	na	-0.0011	-0.0006	0.00001	na	11	35.652	-22.904	15.238	

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Survival L4 (S4)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature=24.30435

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

Intercept	PhO	PhOxT	S	SxT	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
0.957	**na**	**na**	**na**	**na**	**na**	**0.004**	**-0.0002**	**-0.0001**	**6**	**2.543**	**12.165**	**0.000**	**1.000**
0.754	na	na	na	na	0.008	0.004	-0.0002	-0.0001	7	3.455	14.557	2.393	
1.002	na	na	na	na	na	na	-0.0002	0.0000	5	-0.768	15.065	2.901	
0.947	na	na	S	na	na	0.005	-0.0002	-0.0001	7	2.796	15.875	3.711	
0.777	na	na	na	na	0.009	na	-0.0003	0.0000	6	0.056	17.139	4.974	
0.471	PhO	PhOxT	na	na	0.021	0.004	-0.0002	-0.0001	11	14.431	17.139	4.974	
0.963	PhO	na	na	na	na	0.005	-0.0001	-0.0001	8	4.106	18.074	5.910	
0.738	na	na	S	na	0.009	0.005	-0.0002	-0.0001	8	3.771	18.743	6.579	
1.003	na	na	S	na	na	na	-0.0002	0.0000	6	-0.766	18.783	6.618	
0.608	PhO	PhOxT	na	na	0.016	na	-0.0002	0.0000	10	9.584	19.166	7.001	
1.213	na	na	na	na	-0.011	0.005	na	-0.0001	6	-1.284	19.819	7.654	
0.977	PhO	na	na	na	na	na	-0.0002	0.0000	7	0.179	21.108	8.944	
0.777	na	na	S	na	0.009	na	-0.0003	0.0000	7	0.056	21.355	9.191	
0.788	PhO	na	na	na	0.007	0.005	-0.0002	-0.0001	9	4.903	22.040	9.876	
1.309	na	na	na	na	-0.013	na	na	0.0000	5	-4.516	22.562	10.398	
0.962	PhO	na	S	na	na	0.005	-0.0001	-0.0001	9	4.218	23.409	11.245	
0.470	PhO	PhOxT	na	na	0.021	0.004	na	-0.0001	10	7.369	23.596	11.432	
1.200	na	na	S	na	-0.011	0.006	na	-0.0001	7	-1.105	23.677	11.513	
0.747	na	na	S	SxT	0.008	0.005	-0.0002	-0.0001	9	3.787	24.273	12.108	
0.787	PhO	na	na	na	0.008	na	-0.0003	0.0000	8	0.833	24.619	12.454	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis

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Survival Pupa (S5)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature=24.47826

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

Intercept	PhO	PhOxT	S	SxT	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
0.958	na	na	na	na	na	0.003	-0.00032	-0.00007	6	5.702	5.847	0.000	0.481
0.727	na	na	na	na	0.009	0.003	-0.00042	-0.00007	7	7.230	7.007	1.161	0.269
0.985	**na**	**na**	**na**	**na**	**na**	**na**	**-0.00032**	**-0.00004**	**5**	**3.190**	**7.150**	**1.303**	**0.250**
0.749	na	na	na	na	0.010	na	-0.00042	-0.00004	6	4.498	8.254	2.407	
0.950	na	na	S	na	na	0.004	-0.00032	-0.00007	7	6.088	9.291	3.444	
0.981	na	na	S	na	na	na	-0.00032	-0.00004	6	3.253	10.745	4.898	
0.722	na	na	S	na	0.009	0.004	-0.00041	-0.00007	8	7.635	11.016	5.169	
1.705	PhO	PhOxT	na	na	-0.032	na	-0.00042	-0.00004	10	13.181	11.971	6.124	
0.744	na	na	S	na	0.009	na	-0.00042	-0.00004	7	4.593	12.281	6.434	
0.937	PhO	na	na	na	na	0.003	-0.00032	-0.00007	8	6.573	13.139	7.292	
0.947	PhO	na	na	na	na	na	-0.00032	-0.00004	7	3.880	13.707	7.860	
0.736	PhO	na	na	na	0.009	0.003	-0.00041	-0.00007	9	7.797	16.252	10.405	
0.717	na	na	S	SxT	0.010	0.004	-0.00042	-0.00007	9	7.651	16.544	10.697	
0.746	PhO	na	na	na	0.009	na	-0.00041	-0.00004	8	4.837	16.611	10.765	
0.736	na	na	S	SxT	0.010	na	-0.00043	-0.00004	8	4.637	17.011	11.164	
1.647	PhO	PhOxT	na	na	-0.030	0.001	-0.00042	-0.00005	11	14.153	17.693	11.846	
0.936	PhO	na	S	na	na	0.004	-0.00032	-0.00008	9	6.827	18.193	12.346	
0.947	PhO	na	S	na	na	na	-0.00032	-0.00004	8	3.880	18.525	12.678	
1.705	PhO	PhOxT	S	na	-0.032	na	-0.00042	-0.00004	11	13.435	19.130	13.283	
1.021	na	na	na	na	na	-0.004	-0.00034	na	5	-4.278	22.086	16.239	

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Survival Larva (S6)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature=24.875

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

Intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxPh	OxS	PHxS	FxS	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
1.066	na	na	+	+	+	+	na	na	na	na	na	na	-0.0064	-0.005	-0.00017	na	10	-0.935	29.204	0.000	0.130
1.420	na	na	+	+	+	+	na	na	na	na	na	na	-0.0211	-0.005	na	na	9	-2.845	29.497	0.293	0.112
0.655	+	+	+	na	+	+	na	na	na	na	na	na	0.0079	-0.005	-0.00019	na	11	0.717	29.670	0.467	0.103
0.977	+	na	+	+	+	+	na	na	na	na	na	na	-0.0059	-0.005	-0.00019	na	11	0.707	29.690	0.486	0.102
0.911	na	na	+	na	+	+	na	na	na	na	na	na	0.0003	-0.005	-0.00019	na	9	-2.970	29.747	0.543	0.099
0.902	**na**	**na**	**na**	**na**	**+**	**+**	**na**	**na**	**na**	**na**	**na**	**na**	**0.0024**	**-0.005**	**-0.00022**	**na**	**8**	**-4.966**	**30.431**	**1.227**	**0.070**
1.365	+	na	+	+	+	+	na	na	na	na	na	na	-0.0216	-0.005	na	na	10	-1.657	30.647	1.443	0.063
1.292	na	na	+	na	+	+	na	na	na	na	na	na	-0.0154	-0.005	na	na	8	-5.141	30.782	1.578	0.059
1.023	+	+	+	na	+	+	na	na	na	na	na	na	-0.0069	-0.005	na	na	10	-1.736	30.806	1.602	0.058
0.860	na	na	+	na	+	+	na	na	na	na	na	na	0.0001	na	-0.00018	-0.00005	9	-3.583	30.973	1.769	0.054
0.749	+	na	+	na	+	+	na	na	na	na	na	na	0.0014	na	-0.00019	-0.00005	10	-1.865	31.064	1.860	0.051
0.822	+	na	+	na	+	+	na	na	na	na	na	na	0.0014	-0.005	-0.00021	na	10	-1.911	31.155	1.951	0.049
1.206	na	na	+	na	+	+	na	na	na	na	na	na	-0.0142	na	na	-0.00005	8	-5.340	31.179	1.975	0.048
0.965	+	na	+	+	+	+	na	na	+	na	na	na	-0.0068	-0.005	-0.00018	na	12	1.849	31.445	2.242	
0.641	+	+	+	na	+	+	na	na	+	na	na	na	0.0073	-0.005	-0.00018	na	12	1.645	31.852	2.648	
0.895	na	na	+	na	+	+	na	na	na	na	na	na	0.0001	-0.003	-0.00018	-0.00002	10	-2.286	31.905	2.701	
1.334	+	na	+	+	+	+	na	na	+	na	na	na	-0.0219	-0.005	na	na	11	-0.429	31.961	2.757	
1.136	+	na	+	na	+	+	na	na	na	na	na	na	-0.0143	na	na	-0.00005	9	-4.105	32.016	2.812	
0.858	+	na	+	+	+	+	na	na	na	na	na	na	-0.0037	na	-0.00018	-0.00005	11	-0.615	32.333	3.129	
1.254	na	na	+	na	+	+	na	na	na	na	na	na	-0.0148	-0.003	na	-0.00002	9	-4.326	32.459	3.255	

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Survival Larva + Pupa (S7)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature=24.18298

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxPh	OxS	PhxF	PhxS	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc weights (ΔAICc < 2)
0.725	**+**	**na**	**+**	**na**	**na**	**na**	**na**	**na**	**+**	**na**	**na**	**na**	**na**	**na**	**-0.0002**	**-0.00005**	**8**	**2.080**	**16.806**	**0.000**	**0.660**
1.072	+	na	+	na	na	na	na	na	+	na	na	na	-0.015	na	na	-0.00006	8	1.416	18.133	1.327	0.340
0.868	+	na	+	na	na	na	na	na	+	na	na	na	-0.006	na	-0.0001	-0.00005	9	2.557	19.315	2.508	
1.151	+	na	+	+	na	na	na	na	+	na	na	na	-0.019	na	na	-0.00005	9	2.494	19.440	2.633	
0.733	+	na	+	na	na	na	+	na	+	na	na	na	na	na	-0.0002	-0.00005	9	2.239	19.951	3.144	
0.983	+	+	+	na	na	na	na	na	+	na	na	na	-0.011	na	na	-0.00005	9	2.202	20.024	3.217	
0.727	+	na	+	na	na	na	na	na	+	na	na	na	na	-0.0004	-0.0002	-0.00005	9	2.108	20.213	3.406	
0.724	+	na	+	na	+	na	na	na	+	na	na	na	na	na	-0.0002	-0.00005	9	2.083	20.262	3.456	
0.858	na	na	na	na	na	na	na	na	na	na	na	na	na	na	-0.0002	-0.00005	5	-4.321	20.516	3.710	
0.799	na	na	+	na	na	na	na	na	na	na	na	na	na	na	-0.0002	-0.00005	6	-3.242	21.193	4.386	
1.082	+	na	+	na	na	na	+	na	+	na	na	na	-0.015	na	na	-0.00006	9	1.617	21.194	4.387	
0.962	+	na	+	+	na	na	na	na	+	na	na	na	-0.011	na	-0.0001	-0.00005	10	3.393	21.362	4.556	
1.072	+	na	+	na	+	na	na	na	+	na	na	na	-0.015	na	na	-0.00006	9	1.418	21.593	4.787	
1.072	+	na	+	na	na	na	na	na	+	na	na	na	-0.015	0.0000	na	-0.00006	9	1.416	21.596	4.789	
0.795	+	+	+	na	na	na	na	na	+	na	na	na	-0.003	na	-0.0001	-0.00005	10	3.270	21.607	4.801	
0.872	na	na	na	na	na	na	+	na	na	na	na	na	na	na	-0.0002	-0.00005	6	-3.711	22.133	5.326	
0.881	+	na	na	na	na	na	na	na	na	na	na	na	na	na	-0.0002	-0.00005	6	-3.789	22.287	5.480	
1.165	+	na	+	+	na	na	+	na	+	na	na	na	-0.019	na	na	-0.00005	10	2.769	22.610	5.804	
0.880	+	na	+	na	na	na	+	na	+	na	na	na	-0.006	na	-0.0001	-0.00005	10	2.740	22.667	5.861	
0.719	+	na	+	na	na	na	+	na	+	+	na	na	na	na	-0.0002	-0.00005	10	2.682	22.785	5.978	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis
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Survival Egg to Adult (S8)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
T3=(Temperature-Tmean)^3
T4=(Temperature-Tmean)^4
Tmean=mean temperature=23.89189

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	F	FxT	S	SxT	OxS	T	T2	T3	T4	p	LL	AICc	ΔAICc	AICc wei (ΔAICc < 2)
1.374	**na**	**na**	**+**	**na**	**na**	**na**	**na**	**na**	**-0.023**	**-0.005**	**na**	**na**	**6**	**-5.652**	**27.304**	**0.000**	**0.245**
1.377	na	na	+	na	na	+	na	na	-0.023	-0.005	na	na	7	-3.891	27.383	0.079	0.236
1.213	+	na	na	na	na	+	na	na	-0.023	-0.005	na	na	7	-4.419	28.438	1.134	0.139
1.212	na	na	na	na	na	+	+	na	-0.021	-0.005	na	na	7	-4.779	29.158	1.854	0.097
1.247	na	na	na	na	na	+	na	na	-0.023	-0.005	na	na	6	-6.590	29.179	1.876	0.096
1.344	na	na	+	na	na	+	+	na	-0.021	-0.005	na	na	8	-2.823	29.224	1.920	0.094
1.158	na	na	na	+	+	+	na	na	-0.019	-0.005	na	na	8	-2.827	29.232	1.929	0.093
1.313	+	na	+	na	na	+	na	na	-0.023	-0.005	na	na	8	-3.076	29.732	2.428	
1.177	+	na	na	na	na	+	+	na	-0.022	-0.005	na	na	8	-3.181	29.941	2.637	
1.480	na	na	+	na	na	na	na	na	-0.027	-0.005	0.000068	na	7	-5.283	30.165	2.862	
1.339	+	na	+	na	na	na	na	na	-0.023	-0.005	na	na	7	-5.424	30.448	3.144	
1.484	na	na	+	na	na	+	na	na	-0.027	-0.005	0.000068	na	8	-3.465	30.509	3.205	
1.276	na	na	+	+	+	na	na	na	-0.019	-0.005	na	na	8	-3.582	30.743	3.439	
1.375	na	na	+	+	na	na	na	na	-0.023	-0.005	na	na	7	-5.612	30.823	3.519	
1.370	na	na	+	na	na	na	na	na	-0.023	-0.005	na	-0.000003	7	-5.629	30.858	3.555	
1.276	na	na	+	+	+	+	na	na	-0.019	-0.005	na	na	9	-1.441	30.883	3.579	
1.183	+	na	na	+	na	+	na	na	-0.023	-0.005	na	na	8	-3.713	31.005	3.701	
1.339	+	na	na	na	na	+	na	na	-0.028	-0.005	0.000079	na	8	-3.872	31.322	4.019	
1.094	+	na	na	+	+	+	na	na	-0.019	-0.005	na	na	9	-1.663	31.326	4.022	
1.375	na	na	+	na	na	+	na	na	-0.023	-0.005	na	-0.000001	8	-3.885	31.349	4.045	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis
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1/Pre-oviposition period (A1)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod
T=Temperature
p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxPh	OxS	FxS	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
0.095	O	OxT	Ph	PhxT	F	FxT	S	na	na	na	FxS	0.0000	14	131.287	-228.306	0.000	0.653
-0.056	**na**	**na**	**Ph**	**PhxT**	**F**	**FxT**	**S**	**SxT**	**na**	**na**	**FxS**	**0.0068**	**13**	**129.195**	**-227.038**	**1.268**	**0.347**
0.082	O	OxT	Ph	PhxT	F	FxT	S	na	na	na	na	-0.0001	13	128.656	-225.959	2.347	
0.065	O	OxT	Ph	PhxT	F	FxT	S	SxT	na	na	FxS	0.0013	15	131.465	-225.657	2.649	
0.098	O	OxT	Ph	PhxT	F	FxT	S	na	na	OxS	FxS	0.0000	15	131.357	-225.441	2.865	
0.076	O	OxT	Ph	PhxT	F	FxT	S	na	na	OxS	na	0.0001	14	129.226	-224.184	4.122	
-0.055	O	na	Ph	PhxT	F	FxT	S	SxT	na	na	FxS	0.0068	14	129.210	-224.152	4.154	
0.066	O	OxT	Ph	PhxT	F	FxT	S	SxT	na	na	na	0.0006	14	128.707	-223.145	5.161	
-0.070	na	na	Ph	PhxT	F	FxT	S	SxT	na	na	na	0.0068	12	125.717	-222.913	5.393	
0.069	O	OxT	Ph	PhxT	F	FxT	S	SxT	na	OxS	FxS	0.0012	16	131.518	-222.667	5.639	
0.091	O	OxT	Ph	PhxT	F	FxT	S	na	OxPh	na	FxS	0.0002	16	131.447	-222.525	5.782	
-0.008	na	na	Ph	PhxT	F	FxT	S	na	na	na	FxS	0.0050	12	125.454	-222.385	5.921	
0.095	O	OxT	Ph	PhxT	F	na	S	na	na	na	FxS	0.0001	13	126.650	-221.946	6.360	
0.158	O	OxT	Ph	PhxT	F	na	S	SxT	na	na	FxS	-0.0026	14	128.017	-221.765	6.541	
0.051	O	OxT	Ph	PhxT	F	FxT	S	SxT	na	OxS	na	0.0012	15	129.340	-221.407	6.899	
-0.055	O	na	Ph	PhxT	F	FxT	S	SxT	na	OxS	FxS	0.0068	15	129.210	-221.148	7.158	
0.153	O	OxT	Ph	PhxT	F	na	S	SxT	na	na	na	-0.0031	13	125.949	-220.545	7.761	
-0.074	O	na	Ph	PhxT	F	FxT	S	SxT	na	na	na	0.0068	13	125.806	-220.259	8.047	
0.079	O	OxT	Ph	PhxT	F	FxT	S	na	OxPh	na	na	0.0000	15	128.765	-220.257	8.049	
0.085	O	OxT	Ph	PhxT	F	na	S	na	na	na	na	-0.0001	12	124.389	-220.257	8.049	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis
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1/Generation Time (A2)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod
T=Temperature
p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	FxS	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
0.012	O	OxT	Ph	PhxT	na	na	S	na	na	0.0006	11	191.005	-354.621	0.000	0.366
0.023	O	OxT	Ph	PhxT	na	na	S	SxT	na	0.0002	12	191.771	-353.042	1.579	0.166
-0.005	**na**	**na**	**Ph**	**PhxT**	**na**	**na**	**S**	**na**	**na**	**0.0015**	**9**	**187.270**	**-353.011**	**1.610**	**0.164**
0.018	O	OxT	Ph	PhxT	F	na	S	na	FxS	0.0006	13	193.359	-352.974	1.648	0.161
0.017	O	OxT	Ph	PhxT	F	FxT	S	na	FxS	0.0006	14	194.932	-352.733	1.889	0.143
0.015	O	OxT	Ph	PhxT	F	FxT	S	na	na	0.0006	13	193.172	-352.598	2.023	
0.015	O	OxT	Ph	PhxT	F	na	S	na	na	0.0006	12	191.543	-352.586	2.035	
-0.012	na	na	Ph	PhxT	F	FxT	S	SxT	na	0.0018	12	191.174	-351.848	2.773	
-0.004	na	na	Ph	PhxT	na	na	na	na	na	0.0015	8	185.187	-351.604	3.017	
0.013	O	OxT	Ph	PhxT	na	na	na	na	na	0.0007	10	187.964	-351.528	3.094	
-0.002	na	na	Ph	PhxT	F	na	S	na	FxS	0.0015	11	189.393	-351.397	3.224	
-0.010	na	na	Ph	PhxT	F	FxT	S	SxT	FxS	0.0018	13	192.523	-351.301	3.321	
0.028	O	OxT	Ph	PhxT	F	na	S	SxT	FxS	0.0002	14	194.153	-351.175	3.446	
0.026	O	OxT	Ph	PhxT	F	na	S	SxT	na	0.0001	13	192.397	-351.049	3.572	
-0.005	na	na	Ph	PhxT	F	FxT	S	na	na	0.0015	11	189.192	-350.996	3.626	
-0.004	na	na	Ph	PhxT	F	na	S	na	na	0.0015	10	187.687	-350.973	3.648	
-0.003	na	na	Ph	PhxT	F	FxT	S	na	FxS	0.0015	12	190.733	-350.965	3.656	
-0.008	na	na	Ph	PhxT	na	na	S	SxT	na	0.0016	10	187.517	-350.634	3.988	
-0.006	O	na	Ph	PhxT	na	na	S	na	na	0.0015	10	187.504	-350.608	4.013	
-0.016	na	na	na	na	F	na	S	na	FxS	0.0021	7	182.895	-349.677	4.945	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis

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Daily Fecundity (A3)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod

T=Temperature
T2=(Temperature-Tmean)^2
Tmean=mean temperature=23.60959

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	OxPh	OxS	FxS	T	T2	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
70.728	**O**	**OxT**	**na**	**na**	**F**	**FxT**	**na**	**na**	**na**	**na**	**na**	**-2.049**	**-0.186**	**9**	**-281.904**	**584.665**	**0.000**	**0.099**
68.214	O	OxT	na	na	F	FxT	S	na	na	OxS	na	-2.071	-0.177	11	-279.254	584.836	0.171	0.091
69.766	O	OxT	na	na	F	FxT	S	na	na	na	na	-2.102	-0.176	10	-280.656	584.860	0.196	0.090
6.277	na	na	Ph	PhxT	F	FxT	na	na	na	na	na	1.085	-0.199	11	-279.312	584.952	0.287	0.086
6.610	na	na	Ph	PhxT	F	FxT	S	na	na	na	FxS	1.138	-0.177	13	-276.423	585.016	0.352	0.083
67.107	O	OxT	na	na	F	FxT	S	na	na	na	FxS	-1.812	-0.174	11	-279.488	585.303	0.638	0.072
9.203	na	na	na	na	F	FxT	S	SxT	na	na	FxS	0.697	-0.185	10	-280.935	585.418	0.753	0.068
5.491	na	na	Ph	PhxT	F	FxT	S	na	na	na	na	1.113	-0.186	12	-278.196	585.593	0.928	0.062
10.646	na	na	na	na	F	FxT	S	na	na	na	FxS	0.632	-0.177	9	-282.427	585.711	1.046	0.059
6.646	O	na	Ph	PhxT	F	FxT	na	na	OxPh	na	na	1.054	-0.214	14	-275.284	585.810	1.145	0.056
0.599	na	na	na	na	F	na	S	na	na	na	FxS	1.052	-0.150	8	-283.915	586.081	1.416	0.049
12.557	na	na	na	na	F	FxT	na	na	na	na	na	0.523	-0.190	7	-285.218	586.158	1.494	0.047
79.907	O	OxT	Ph	na	F	FxT	na	na	na	na	na	-2.114	-0.204	11	-279.921	586.170	1.506	0.047
80.110	O	OxT	Ph	na	F	FxT	S	na	na	na	na	-2.172	-0.191	12	-278.495	586.190	1.526	0.046
2.651	na	na	na	na	F	na	na	na	na	na	na	0.939	-0.162	6	-286.526	586.324	1.659	0.043
9.284	na	na	na	na	F	FxT	S	na	na	na	na	0.610	-0.181	8	-284.219	586.689	2.024	
62.659	O	OxT	na	na	F	FxT	S	SxT	na	na	na	-1.805	-0.180	11	-280.200	586.728	2.064	
61.289	O	OxT	na	na	F	FxT	S	SxT	na	OxS	na	-1.781	-0.181	12	-278.807	586.813	2.148	
77.785	O	OxT	Ph	na	F	FxT	S	na	na	OxS	na	-2.130	-0.189	13	-277.379	586.927	2.262	
-0.498	na	na	na	na	F	na	S	na	na	na	na	1.022	-0.155	7	-285.602	586.927	2.263	

Did the life history of Multicoloured Asian ladybeetle, *Harmonia axyridis,* change when it spread across the globe? A meta-analysis
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Longevity (A4)

O=Origin
Ph=Photoperiod
F=Food
S=Strain type
PhO=Origin-Photoperiod
Sex=sexe

T=Temperature

p=number of parameters in model
LL=LogLikelihood
AICc=Akaike Information Criterium corrected for small sample sizes
na = factor part of most complex model but excluded from best model

Blue: most parsimonious model within ΔAICc <2
Red: all models within ΔAICc <2

intercept	O	OxT	Ph	PhxT	F	FxT	S	SxT	Sex	Sex xT	FxS	OxSex	T	p	LL	AICc	ΔAICc	AICc weight (ΔAICc < 2)
172.044	O	na	Ph	na	na	na	S	na	na	na	na	na	-2.527	8	-241.568	502.925	0.000	0.208
119.802	O	na	Ph	na	na	na	S	na	na	na	na	na	na	7	-243.192	503.256	0.331	0.176
198.646	**O**	**na**	**na**	**na**	**na**	**na**	**S**	**na**	**na**	**na**	**na**	**na**	**-3.736**	**6**	**-244.781**	**503.661**	**0.737**	**0.144**
180.374	na	na	na	na	F	na	S	na	na	na	na	na	-4.140	6	-244.930	503.960	1.036	0.124
165.180	O	na	Ph	na	F	na	S	na	na	na	na	na	-2.648	9	-240.769	504.403	1.479	0.099
193.196	O	na	na	na	F	na	S	na	na	na	na	na	-3.947	7	-243.803	504.478	1.553	0.096
110.892	O	na	Ph	na	F	na	S	na	na	na	na	na	na	8	-242.563	504.916	1.991	0.077
172.977	na	na	na	na	F	na	S	na	na	na	FxS	na	-3.966	7	-244.025	504.922	1.998	0.077
174.955	O	na	Ph	na	na	na	S	na	Sex	na	na	na	-2.588	9	-241.418	505.701	2.777	
-1105.192	O	OxT	Ph	na	F	na	S	SxT	na	na	na	na	51.828	11	-238.117	505.777	2.853	
198.732	O	na	na	na	na	na	S	na	Sex	na	na	na	-3.757	7	-244.530	505.932	3.007	
170.278	O	na	Ph	na	na	na	S	SxT	na	na	na	na	-2.435	9	-241.544	505.953	3.028	
173.858	O	OxT	Ph	na	na	na	S	na	na	na	na	na	-2.604	9	-241.567	506.000	3.075	
120.890	O	na	Ph	na	na	na	S	na	Sex	na	na	na	na	8	-243.144	506.077	3.153	
178.141	na	na	na	na	F	FxT	S	na	na	na	na	na	-4.016	7	-244.647	506.167	3.242	
184.359	na	na	na	na	na	na	S	na	na	na	na	na	-4.048	5	-247.354	506.171	3.246	
99.221	O	na	Ph	na	F	na	S	na	na	na	FxS	na	na	9	-241.669	506.204	3.279	
192.229	O	na	na	na	F	FxT	S	na	na	na	na	na	-3.812	8	-243.298	506.385	3.460	
175.934	na	na	na	na	F	na	S	SxT	na	na	na	na	-3.956	7	-244.760	506.391	3.466	
198.067	O	na	na	na	na	na	S	SxT	na	na	na	na	-3.705	7	-244.776	506.423	3.499	