

CORRIGENDUM

Self-sterility in flowering plants: preventing self-fertilization increases family diversification rates

Miriam M. Ferrer and Sara V. Good

Annals of Botany **110**: 535–553, 2012

Since the publication of this paper, it has become apparent that an error was made in the calculation of the Kendall–Moran estimates presented, with logarithm to the base 10 being used instead of the natural logarithm. As a result of this error, the Kendall–Moran figures were systematically under-estimated in Figs 5 and 6, and the mean-squares in Table 1 were also incorrect. In addition, the error also affected Fig. S1 and Appendix S2 in the Supplementary Data. However, the conclusions of the paper are not affected as the differences amongst the groups compared remain constant whether the calculation uses logarithm to base 10 or the natural logarithm. The authors apologise for this error, and correct versions of Figs 5 and 6 and Table 1 are reproduced below. A corrected version of the Supplementary Data has also been placed online.

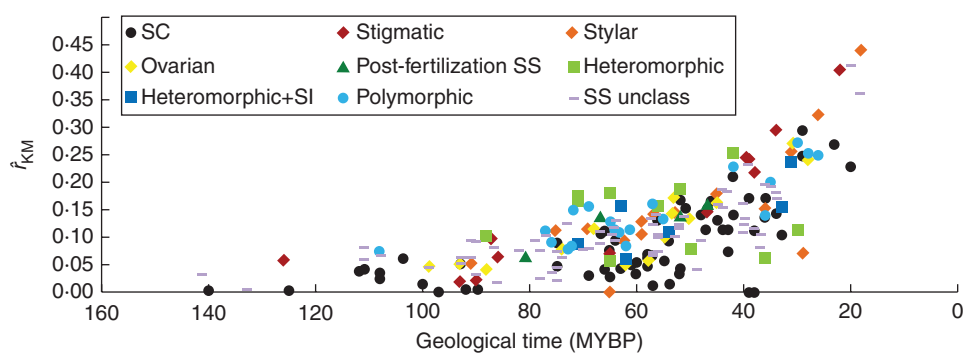


FIG. 5. Family DR of the Kendall–Moran estimator (\hat{r}_{KM}) for 230 families identified as possessing self-compatibility (SC), possessing heteromorphic, or presenting self sterility unclassified (SS unclass) or one of six SI phenotypes: stigmatic, styelar, ovarian, post-fertilization SS, heteromorphic + SI (Het + SI) or as being polymorphic in the site of SI expression. MYBP = millions of years before present.

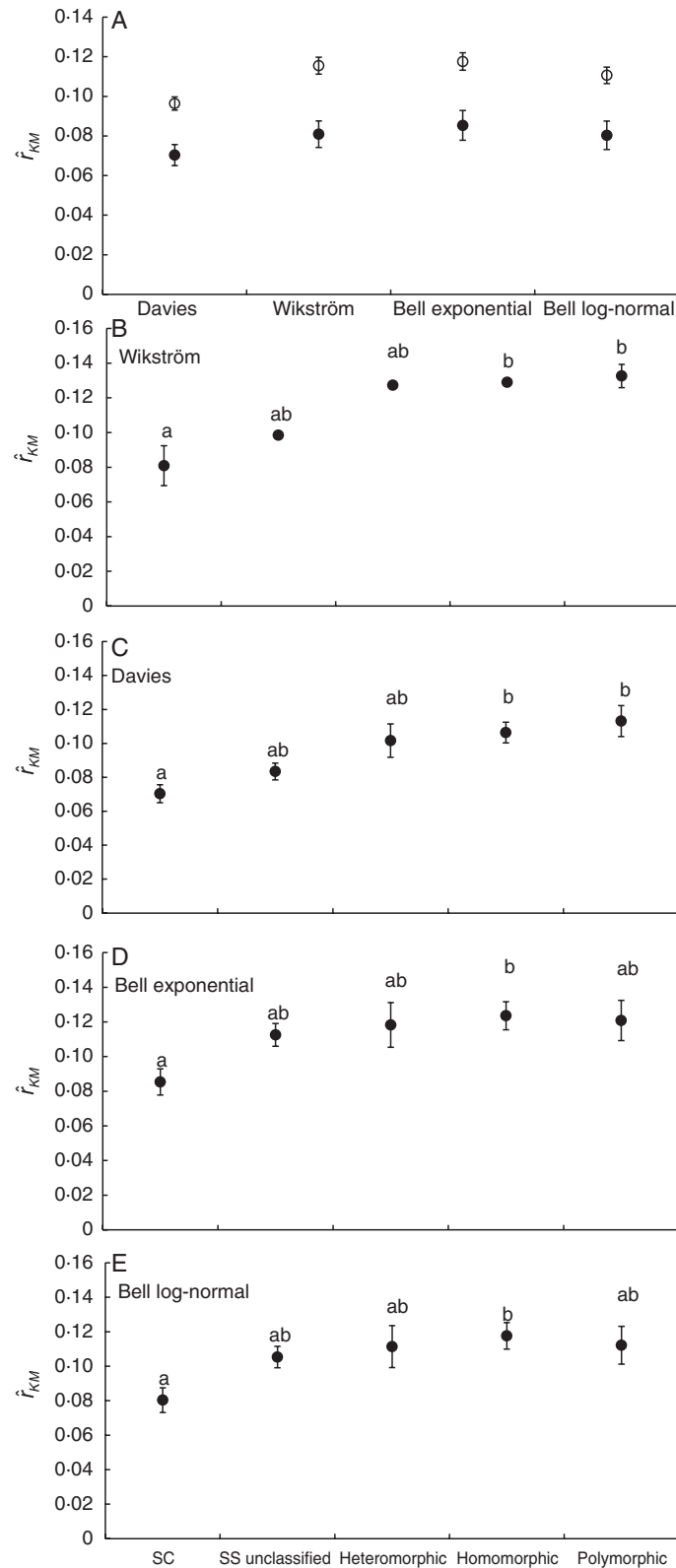


FIG. 6. (A) Mean and standard error of the Kendall–Moran estimator of DR (\hat{f}_{KM}) in 164 and 66 families bearing SS/SI and SC, respectively, using the estimates of Wikström *et al.* (2001), Davies *et al.* (2004) and exponential and log-normal calibrations of Bell *et al.* (2010) for the divergence age of the families. Mean and standard error of Kendall–Moran estimator of DR (\hat{f}_{KM}) using the estimates of (B) Wikström *et al.* (2001), (C) Davies *et al.* (2004) and (D) exponential and (E) log-normal calibrations of Bell *et al.* (2010) for the divergence age of the 44 families bearing homomorphic SI, 19 with heteromorphy, 22 with polymorphic basis to SI, 74 families bearing SS unclassified species and for 66 families bearing SC. Means with different letters were found to be significantly different (Tukey HSD test, $P < 0.05$).

TABLE 1. ANOVA results for the fixed-effect model of (A) presence of self-sterility, (B) types of self-sterility and (C) self-sterility/self-incompatibility (SS/SI) phenotype on the Kendall–Moran estimate of family DR using the squared age of divergence of the family as a covariate

Effect	d.f.	MS effect	MS error	F	P
(A) Presence of self-sterility					
Wikström <i>et al.</i> (2001)					
Presence of self-sterility	2, 227	0.0474	0.0030	16.00	<0.0001
Squared age of divergence of the family	1, 227	0.3800	0.0030	128.14	<0.0001
Davies <i>et al.</i> (2004)					
Presence of self-sterility	2, 227	0.0210	0.0019	11.32	0.0009
Squared age of divergence of the family	1, 227	0.2346	0.0019	126.76	<0.0001
Exponential Bell <i>et al.</i> (2004)					
Presence of self-sterility	2, 203	0.0312	0.0029	10.62	0.0013
Squared age of divergence of the family	1, 203	0.2901	0.0029	98.57	<0.0001
Log-normal Bell <i>et al.</i> (2004)					
Presence of self-sterility	2, 203	0.0266	0.0026	10.06	0.0018
Squared age of divergence of the family	1, 203	0.2541	0.0026	96.05	<0.0001
(B) Types of self-sterility					
Wikström <i>et al.</i> (2001)					
Types of self-sterility	4, 224	0.0166	0.0029	5.69	0.0002
Squared age of divergence of the family	1, 224	0.3594	0.0029	123.06	<0.0001
Davies <i>et al.</i> (2004)					
Types of self-sterility	4, 224	0.0080	0.0018	4.35	0.0021
Squared age of divergence of the family	1, 224	0.2215	0.0018	121.20	<0.0001
Exponential Bell <i>et al.</i> (2004)					
Types of self-sterility	4, 200	0.0086	0.0030	2.90	0.023
Squared age of divergence of the family	1, 200	0.2897	0.0030	97.52	<0.0001
Log-normal Bell <i>et al.</i> (2004)					
Types of self-sterility	4, 200	0.0075	0.0027	2.81	0.0268
Squared age of divergence of the family	1, 200	0.2533	0.0027	94.90	<0.0001
(C) Self-sterility/self-incompatibility					
Wikström <i>et al.</i> (2001)					
SS/SI phenotype	8, 220	0.0099	0.0029	3.39	0.0011
Squared age of divergence of the family	1, 220	0.3619	0.0029	124.12	<0.0001
Davies <i>et al.</i> (2004)					
SS/SI phenotype	8, 220	0.0052	0.0018	2.89	0.0045
Squared age of divergence of the family	1, 220	0.2222	0.0018	122.46	<0.0001
Exponential Bell <i>et al.</i> (2004)					
SS/SI phenotype	8, 196	0.0057	0.0030	1.93	0.0577
Squared age of divergence of the family	1, 196	0.2889	0.0030	97.15	<0.0001
Log-normal Bell <i>et al.</i> (2004)					
SS/SI phenotype	8, 196	0.0051	0.0027	2.68	0.0082
Squared age of divergence of the family	1, 196	0.2544	0.0027	171.82	<0.0001

The analyses were performed on the Wikström *et al.* (2001), Davies *et al.* (2004) and exponential and log-normal Bell *et al.* (2010) estimates of the divergence age of families.