

Review of GENETICS manuscript 302005 by Sakamoto & Innan

Summary

General comments

X. The authors consider a one-locus migration–selection model with two subpopulations of finite size and they allow for genetic drift. .

Minor comments

Model

- [p. 6, l. 29] The introduction to Equation 3 seems too compact. I suggest saying something along the lines of “After substitution of Equation 2 into Equation 1, one can show that solutions to Equation 1 can be obtained by solving the following system of equations:”. Along the same lines, it would therefore appear that there are solutions to Equation 1 that are not found by solving Equation 3. The non-existence of further solutions would need to be proved, but this does not seem necessary here.

Discussion

- [p. 15, l. 19] It is confusing to read “a” without knowing whether it is the “allele a” or the article “a”. Either use a different font to denote the alleles, or always say “allele a” and “allele A”. Further confusion could arise due to the fact that a is also used as a coefficient in Equation 4. For consistency, the notation for alleles B and b should also be adjusted.