PublisherInfo		
PublisherName	:	BioMed Central
PublisherLocation	:	London
PublisherImprintName	:	BioMed Central

The benefits of sex

ArticleInfo		
ArticleID	:	4659
ArticleDOI	:	10.1186/gb-spotlight-20021212-01
ArticleCitationID	:	spotlight-20021212-01
ArticleSequenceNumber	:	325
ArticleCategory	:	Research news
ArticleFirstPage	:	1
ArticleLastPage	:	2
ArticleHistory	:	RegistrationDate : 2002–12–12 OnlineDate : 2002–12–12
ArticleCopyright	:	BioMed Central Ltd2002
ArticleGrants	:	
ArticleContext	:	130593311

Jonathan B Weitzman
Email: jonathanweitzman@hotmail.com

Explaining the evolutionary benefits of sex presents a challenge. In the December 12 Nature Nick Colegrave, from the University of Edinburgh, UK describes how sex has a marked effect on the rate of adaptation in large populations, but less effect in small populations (*Nature* 2002, **420**:664-666). The effect of sex appears to be linked to the abundance of beneficial mutations, suggesting that large populations may have a larger number of mutations and therefore greater benefits from sex. Colegrave studied 20 populations of the facultatively sexual single-celled chlorophyte *Chlamydomonas reinhardtii* to examine adaptive evolution to novel growth medium conditions. Comparison of the growth rate of sexual and asexual populations showed that in large populations sex appears to release the 'speed limit' on adaptation set by clonal interference.

References

1. The advantage of sex in evolving yeast populations.

2. *Nature*, [http://www.nature.com]

3. University of Edinburgh , [http://www.ed.ac.uk]