

## ***Interactive comment on “Effect of salinity induced pH changes on benthic foraminifera: a laboratory culture experiment” by R. Saraswat et al.***

**Anonymous Referee #1**

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I have 2 primary concerns regarding this manuscript. First, the experimental design does not provide a mechanism to discern between the effects of salinity and pH. Is this foraminiferan responding to changes in salinity, alkalinity, or pH? There is no way to tell because salinity and pH co-vary. Alkalinity was not measured. The conclusions of the study are therefore not supported.

Second, I am concerned about the discussion of “paired” specimens as a prerequisite for sexual reproduction. Is the species studied plastogamic as implied here? Sliter (1965, Laboratory experiments on the life cycle and ecologic controls of *Rosalina globularis* d’Orbigny; Journal of Protozoology, 12:210-215) described the formation of float chambers (the “Tretomphalus” stage) in gamonts of *R. globularis* prior to the release of gametes during sexual reproduction. *R. globularis* therefore is not a plastogamic

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species. Are the authors certain that this species is indeed *R. globularis*?

Additional comments:

The results section is not well organized and is difficult to follow.

Are the abnormally formed individuals mentioned simply growing around clumps of food? It is not uncommon for species of *Rosalina* to conform to the shape of the substrate.

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Interactive comment on Biogeosciences Discuss., 8, 8423, 2011.

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