

## Erratum to: Influence of summer marine fog and low cloud stratus on water relations of evergreen woody shrubs (*Arctostaphylos*: Ericaceae) in the chaparral of central California

Michael C. Vasey · Michael E. Loik ·  
V. Thomas Parker

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The authors would like to correct an error in the original publication of the article. The error requires modification of details for “Data analysis” under “Materials and methods”, “Xylem vulnerability to vascular cavitation” under “Results”, “Discussion”, and in Fig. 6. The corrected content and figure are given below for your reading.

Vasey et al. (2012) published a study examining water relations of *Arctostaphylos* species along a coast-to-interior climate gradient in west central California. In the xylem cavitation analysis, we erred by treating sample stem segments as subjects to evaluate the question, “Is there a significant life history  $\times$  zone interaction?” We should have used stem population means as subjects from central subregion *Arctostaphylos* species (Table S2) based upon stem sample  $P_{50}$  values. According to this analysis the following corrections were made.

The last paragraph of sub-heading “Data analysis” under “Materials and methods” should read:

To assess comparative xylem vulnerability to vascular cavitation of seeder and resprouter species located in

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M. C. Vasey (✉) · M. E. Loik  
Department of Environmental Studies,  
University of California, Santa Cruz, CA 95064, USA  
e-mail: mcvasey@gmail.com

M. C. Vasey · V. T. Parker  
Department of Biology, San Francisco State University,  
San Francisco, CA 94132, USA

different summer marine layer climate zones, we ran a mixed model using REML variance components estimates in JMP 9 (SAS, Cary, NC, USA) with population mean  $P_{50}$  values as dependent variables, life history mode and dry season climate zone as fixed factors (including their life history  $\times$  zone interaction), and species populations nested within life history, and sites nested within zone, as random factors. We used nine populations from eight species and contrasted maritime sites (Fort Ord and Pajaro Hills) to non-maritime sites (Gabilan Ranch and Pine Canyon) (Table S2). Significant differences among all nine stem sample population means ( $n = 5-6$ ) were evaluated using one-way ANOVA and Tukey HSD post hoc tests.

The text under the sub-heading “Xylem vulnerability to vascular cavitation” of “Results” should read:

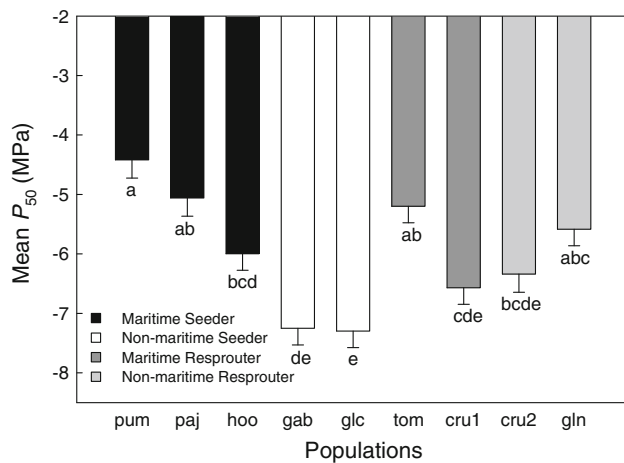
The xylem vulnerability zone  $\times$  life history interaction was marginally significant ( $F_{1,1} = 8.65$ ,  $P = 0.059$ ) with the mixed model but there was a significant difference among means based upon the one-way ANOVA ( $F_{8,42} = 11.65$ ,  $P < 0.0001$ ). Two obligate seeders from the non-maritime zone (transition and interior zone) (*A. gabilanensis* and *A. glauca*) were found to have significantly more negative  $P_{50}$  values than maritime seeders (*A. pumila* and *A. pajaroensis*), while one maritime seeder (*A. hookeri*) in a different clade than the other species (Table S2) was intermediate between maritime and non-maritime species (revised Fig. 6). Resprouter mean  $P_{50}$  values did not reveal a pattern consistent with climate zone influence.

The lines 10–15 in the fifth paragraph under “Discussion” should read:

The xylem vulnerability analysis (revised Fig. 6) suggests differentiation among *Arctostaphylos* species, with

significant  $P_{50}$  differences between maritime zone seeders and non-maritime zone seeders as we hypothesized based on their different  $\Psi_{\min}$  values (Bhaskar and Ackerly 2006). Because xylem resistance to cavitation is likely to be a strongly selected adaptive character (Pockman and Sperry 2000; Maherali et al. 2004; Bhaskar and Ackerly 2006), these data suggest that maritime seeders may be more vulnerable to drought-induced xylem cavitation than non-maritime seeders if the summer marine layer deteriorates and coastal conditions become hotter and dryer. However, we recommend that this interpretation be viewed cautiously pending further study with greater replication.

The corrected Fig. 6 and the caption are produced below:



**Fig. 6** Comparison of xylem vulnerability ( $P_{50}$ ) means for populations of maritime seeders, non-maritime seeders, maritime resprouters and non-maritime resprouters. Pum (*A. pumila*; Fort Ord;  $n = 5$ ), paj (*A. pajaroensis*; Pajaro Hills;  $n = 5$ ), hoo (*A. hookeri*; Pajaro Hills;  $n = 6$ ), gab (*A. gabilanensis*; Gabilan Ranch;  $n = 6$ ), glc (*A. glauca*; Indians;  $n = 6$ ), tom (*A. tomentosa*; Fort Ord;  $n = 6$ ), cru1 (*A. crustacea*; Pajaro Hills;  $n = 6$ ), cru2 (*A. crustacea*; Gabilan Ranch;  $n = 5$ ), and gln (*A. glandulosa*; Indians;  $n = 6$ ) (see Table S2). Lower case letters represent significant differences among population means based on a one-way ANOVA and Tukey HSD post hoc tests

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