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Title: **Research on artificial seawater quality in the *Penaeus vannamei* larval breeding ponds**

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Abstract: In order to overcome the losses caused by long-distance transportation, we try to use artificial seawater for *Penaeus vannamei* larval breeding locally. In 2011, we added seawater crystal and coarse salt to the natural freshwater from adjacent river for *Penaeus vannamei* larval breeding in Fengxian district of Shanghai. During the breeding period, we monitored water quality everyday and the results were as following: DO was 7.3($\pm$0.10) mg/L, pH was 8.00($\pm$0.04), temperature was 28.2($\pm$0.20)°C, PO_4–P was 0.88($\pm$0.14) mg/L, TP was 1.46($\pm$0.14) mg/L, NO_2–N was 0.21($\pm$0.02) mg/L, NO_3^-–N was 1.52($\pm$0.10) mg/L, TNH_4–N was 2.88($\pm$0.34) mg/L, TN was 7.01($\pm$0.36) mg/L, and COD_{Mn} was 18.05 ($\pm$1.40) mg/L. Biological and chemical methods were used for water quality control to create a good environment for larval growth.

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