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Title: Comparison of two techniques for determining community respiration in tropical fish ponds

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Abstract: Two techniques for determining community respiration in organically fertilized tilapia grow-out ponds were compared: (1) whole pond respiration (WPR) from changes in nocturnal dissolved oxygen concentrations corrected for diffusion, and (2) the sum of water column (WCR), benthic (BR), and fish respiration (FR), components of community respiration. Mean WPR (0.568 g O_2 m^{-2} h^{-1}) was significantly higher ($P<0.01$) than mean sum of community respiration components (0.401 g O_2 m^{-2} h^{-1}). Mean WCR, BR, and FR were 0.319, 0.068, and 0.015 g O_2 m^{-2} h^{-1}, respectively. Indirect determinations of community components by difference of WPR and the sum of the other two components will be significantly higher than *in situ* determinations.

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