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Title: Dry matter, ash, and elemental composition of pond-cultured *Penaeus vannamei* and *P. stylirostris*

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Abstract: Mass balance calculations for nutrient elements are useful in determining the efficiency of fertilizers and feeds in aquaculture ponds, for studying the fate of nutrients within pond ecosystems, and for estimating the pollution potential of pond effluents. In research, mass balance computations may be site specific and require complete data on all nutrient inputs and outputs for a particular pond. For general assessments of nutrient mass balance, fewer data are necessary. For example, the potential nitrogen and phosphorus loadings of intensive aquaculture ponds can be estimated from the stocking density, feeding rate, expected feed conversion ratio, and nitrogen and phosphorus concentrations in feed and aquaculture product. Most of the necessary information is easily obtained, but data on whole body, elemental composition of aquaculture species are scarce.

The present study was conducted to assess the elemental composition of two species of shrimp (*Penaeus vannamei* and *P. stylirostris*) that are widely cultured in coastal regions of tropical and subtropical North and South America. Elements of primary concern for pond management and environmental impact considerations are carbon, nitrogen, and phosphorus, but analyses included several other nutrients.

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