

Tipulidae Growth Response To Variation In Leaf C:P

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Crane-fly larvae (*Tipula*) are important processors of detritus in freshwater streams. Ecological Stoichiometry Theory predicts that low-body carbon:phosphorus ratio (C:P) *Tipula* should grow faster when fed low C:P leaves. *Tipula* were fed maple or oak leaves (Range:754-5340C:P) for 28-days. Growth was measured and growth rates in low C:P leaf treatments were over twice that of high C:P treatments. Growth rates for oak treatments were 1.24x the rates for maple treatments. Differential growth response to leaf type might indicate carbon quality differences. Growth responses of *Tipula* to nutrient enrichment will provide more accurate predictions of macroinvertebrate community change to freshwater eutrophication.