



Fig. 2. Particulate organic carbon (A), nitrogen (B) and phosphorus (C) content in five different exponentially growing phytoplankton cultures washed with either the oxalate reagent or filtered seawater. Shown are results for a diatom (*Thalassiosira weissflogii*), a dinoflagellate (*Prorocentrum minimum*), a cyanobacterium (*Synechococcus* sp.), a prasinophyte (*Tetraselmis* sp.) and a raphidophyte (*Heterosigma akashiwo*). There was no significant difference ( $p > 0.05$ ) in carbon or nitrogen content between cells exposed to the oxalate solution and those rinsed with seawater, indicating that the wash did not remove any cellular carbon or nitrogen. The reagent however removed a surface-adsorbed phosphorus pool corresponding to 14-24% of the total cell-associated phosphorus in these exponential phase cultures. This surface-adsorbed pool constitutes a larger fraction of the total cellular phosphorus in stationary phase cultures and in some field-collected phytoplankton samples (see Fig. 2 in the main text).