Response of *Ligustrum* to Foliar Fertilization

FNGA Endowed Research Fund Report
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Multiple branched liners of *Ligustrum japonicum* Thunb. were greenhouse-grown in 3-liter containers with a common nursery substrate. Plants were fertilized every other week with 460 ml of solution (150N-10P-30K) delivered to substrate surface. On the alternate week, plant foliage was sprayed with a solution that contained either 1798N-546P-1153K, 3596N-1092P-2306K, or 7192N-2184P-4612K (mg•L). N-Sure® or urea was the nitrogen carrier. Phosphorus and potassium carriers for all treatments were potassium hydroxide and potassium phosphate. A control group of plants received weekly the solution delivered to substrate surface while another control group received 14 g of Osmocote 18N-2.6P-10K applied to substrate surface at potting. After 24 fertilizer applications (substrate + foliar), shoot and root dry weights of plants sprayed with urea were greater than plants sprayed with N-Sure®. Dry weights of urea-sprayed plants increased as application rate increased with shoot and root dry weights of 108 and 32 g, respectively, for the highest application rate. These shoot dry weights were greater than those for plants fertilized with Osmocote (77 g) or the solution applied weekly (91 g) to the substrate surface. Data from this preliminary experiment indicate that foliar fertilization of *Ligustrum japonicum* may be used to substitute for every other weekly fertilizer application applied to the substrate surface. This could potentially reduce nutrient loss to the environment.