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<b>Title</b>	Genotypic variation in foundation species generates network structure that may drive community dynamics and evolution
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<b>Contributing Authors</b>	Arthur Keith , Stuart Borrett , Stephen Shuster , Thomas Whitham
	Although genetics in a single species is known to impact whole communities, little is known about how genetic variation influences species interaction networks in complex ecosystems. Here, we use a network perspective to analyze interactions in a community of arthropods living on replicated genotypes (clones) of a foundation tree species,

<b>Abstract</b>	<i>Populus angustifolia</i> James (narrowleaf cottonwood), in a long-term, common garden experiment. We also present a simulation experiment designed to investigate how variation among individual tree genotypes affects network structure. Three findings emerged. 1) The empirical "genotype-species network" exhibited non-random network structure. 2) Even using a conservative null-model, significant co-occurrence patterns were detected in association with individual tree genotypes. 3) Simulated "genotype-species" networks displayed increased structure with increasing community-level genotypic effect. These results demonstrate that genetic variation in a single species contributes to the structure of ecological interaction networks, which could influence ecological dynamics (e.g., assembly and stability) and evolution in a community context.
<b>Key Words</b>	species interactions, foundation species, network ecology, genotype-species networks, modularity, nestedness, centralization, co-occurrence, common garden experiment
<b>Dual Publication</b>	No
<b>Adherence to the ESA Conditions for Publication&lt; h&gt;</b>	Yes

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