

## Evidence for a genetically distinct strain of introduced *Hydrilla verticillata* (Hydrocharitaceae) in North America

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The invasive aquatic weed hydrilla [*Hydrilla verticillata* (L.f.) Royle] exists in North America as two genetically and morphologically distinct strains, with the dioecious strain mostly found in the southern United States and the monoecious strain being more northern, including previously known sites in Connecticut. In 2016 an additional hydrilla population was located in a portion of the Connecticut River in Hartford County, Connecticut, with unusual morphological features relative to other Connecticut populations. Hydrilla plants from this population were subjected to genetic testing, and their molecular sequences for one chloroplast (trnL-F) and two nuclear gene regions (internal transcribed spacer and phytoene desaturase) were compared against published data. The Connecticut River hydrilla plants are distinct from all known North American plants, representing a novel introduction, likely from northern Eurasia. The genetic novelty of this recent introduction may present additional ecological and management challenges beyond what has been encountered for hydrilla to date.