Comparison of Attractions of Two Horntail Wasps, the Japanese Horntail 
(*Urocerus japonicus*) and the Pine Horntail (*U. antennatus*), Causing Wood 
Discoloration Damage

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Wood discoloration in conifers shaped like a star caused by horntail wasps occurs in large areas of plantation forest. Since the damage caused by wood discoloration cannot be distinguished before the wood has been cut, wood discoloration has caused serious economic problems for forest management. Wood discoloration of the Japanese cedar *Cryptomeria japonica* and the hinoki cypress *Chamaecyparis obtusa*, which are major species of forest plantations in Japan, is caused predominantly by the Japanese horntail, *Urocerus japonicus*, and the Pine horntail, *U. antennatus*. To investigate the mechanisms of wood discoloration caused by the two horntail wasps, their attraction responses to the volatile constituents emitted from host plants was measured using an olfactometer developed for horntail wasps. α-Pinene was used as a standard attractant, because it is a major volatile component of Japanese cedar and hinoki cypress and is known to attract horntail wasps in the field. Female Japanese horntails were significantly attracted to α-pinene in the olfactometer, but female Pine horntails were not attracted to it. These results suggest that the horntail wasps use different volatile components to recognize host plants.