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Occurrence of tertiary branched tetraamines in two aquatic plants

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Four aquatic plants were tested for the occurrence of unusual polyamines by high performance liquid chromatography and gas chromatography. The whole plants ubiquitously contained norspermidine, homospermidine, norspermine, and thermospermine in addition to usual polyamines such as diaminopropane, putrescine, spermidine, and spermine. *Pistia stratiotes* L. and *Potamogeton distinctus* A. Bennett contained aminopropylhomospermidine. Caldopentamine was detected in the former plant. Homospermine was found in *Ranunculus aquatilis* L. Two tertiary branched tetraamines, *N*⁴-aminopropyl-norspermidine and *N*⁴-aminopropylspermidine, were detected in *Potamogeton distinctus* and *Sagittaria trifolia* L.