



Christmas Tree Genome Relatively Constant

By **Regina Bailey**, About.com Guide December 13, 2012

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A study of conifer [genes](#) has revealed that the genome of trees such as spruce, pine, and fir has not changed significantly in 100 million years. This is in stark contrast to the [flowering plant](#) genome which has changed dramatically over the same period of time. The researchers studied 157 gene families from both of these types of plants. While both conifers and flowering plants have undergone [gene mutations](#), conifer genes have managed to be very stable over time.

According to researcher Jean Bousquet, "Conifers appear to have achieved a balance with their environment very early. Still today,

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Blue Spruce

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without artifice, these plants thrive over much of the globe, particularly in cold climates. In contrast, flowering plants are under intense evolutionary pressure as they battle for survival and reproduction." The relative stability of conifer genes corresponds to low speciation. The researchers state that while there are about 600 species of conifers, there are over 400,000 species of flowering plants.