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Molecular Population Genetics of the Leucine-rich Repeat Receptor-like Kinase CLAVATA1 in *Arabidopsis thaliana*

In the plant *Arabidopsis thaliana*, the development of new shoots and organs depends on the maintenance of a store of stem cells in the shoot apical meristem. The CLAVATA (CLV) transmembrane receptor complex is thought to maintain the size of the meristem by limiting the proliferation of stem cells. In this complex, CLV1, a leucine-rich repeat receptor-like kinase, binds to another receptor-like protein, CLV2, and a secreted ligand, CLV3, to propagate signals that control stem cell identity. Previous research showed that *CLV2* harbors an unusually high level of nucleotide diversity and an excess of intermediate frequency polymorphisms. To investigate whether elevated diversity is also present in *CLV1*, we sequenced the entire coding region of *CLV1* from 27 accessions of *A. thaliana*. In comparison to *CLV2*, *CLV1* shows a lower level of nucleotide diversity that is more similar to what is typically found in *A. thaliana*. Moreover, the nucleotide polymorphisms observed for *CLV1* occur at low frequency among the *A. thaliana* accessions. Our results indicate that *CLV1* may be evolving differently than its proposed binding partner, *CLV2*.