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The Molecular Population Genetics of the *Arabidopsis CLAVATA2* Gene

The *Arabidopsis thaliana* CLAVATA (CLV) proteins are hypothesized to form a transmembrane receptor complex involved in developmental regulation of the shoot apical meristem. Signals that limit stem cell proliferation are generated when a receptor complex consisting of CLV1 (a LRR-receptor kinase) and CLV2 (a LRR-receptor-like protein) binds the ligand CLV3. Previous research in which a portion of *CLV2* was sequenced from 21 accessions of *A. thaliana* indicated a portion of this locus displays an unusually high level of nucleotide diversity. To investigate whether this elevated diversity is present throughout *CLV2*, we sequenced the entire coding region from 27 geographically diverse accessions of *A. thaliana*. The expanded dataset confirms a high level of polymorphism at *CLV2* with peaks of diversity corresponding to various functional domains within its protein sequence. The DNA sequences form four haplotype groups. These results indicate that *CLV2* may harbor a balanced polymorphism.