Article

Current Biology

Chromatin Organization in Early Land Plants Reveals an Ancestral Association between H3K27me3, Transposons, and Constitutive Heterochromatin

Highlights

- A database combining genomic information and chromatin profiles for *Marchantia*
- Correlations between chromatin marks and transcription are conserved in land plants
- A significant portion of constitutive heterochromatin is marked by H3K27me3
- Insights into the evolution of TAD organization in plants

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In Brief

Montgomery et al. provide a chromosome-scale genome assembly of the early diverging land plant *Marchantia polymorpha*. Profiling of chromatin marks shows conserved roles of active marks and suggests an ancestral association between H3K27me3 and transposons that is partly retained in *Marchantia* and replaced by H3K9 methylation in flowering plants.

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