

Instructions to Authors and Section Chairs
Abstract Submission for Publication in *HortScience*

Length: Limit the abstract body to about 2000 characters.

Font: 12 point

File Format

Each abstracts must be submitted as a separate Word (.doc) file.

If you use another word processing language, save and submit the abstract in a rich text format (.rtf) file.

Electronic Submission: submit as an attachment via E-mail

Format: The abstracts should all be formatted as follows:

Molecular Marker-Derived Genetic Similarity Analysis of a Segregating Blackberry Population

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A tetraploid blackberry population that segregates for two important morphological traits, thornlessness and primocane fruiting, was tested with molecular marker analysis. Both randomly amplified polymorphic DNA (RAPD) and simple sequence repeat (SSR) markers were used to screen a population of 98 genotypes within the population plus the two parents, 'Arapaho' and 'Prime-Jim'[®] (APF-12). RAPD analysis averaged 3.4 markers per primer, whereas SSR analysis yielded 3.0 markers per primer pair.

Similarity coefficient derived from the Dice index averaged over all individuals was 63% for RAPD markers, 73% for SSR markers, and 66% for RAPD and SSR markers together. The average similarity coefficients ranged from a high of 72% to a low of 38% for RAPD markers, 80% to 57% for SSR markers, and 73% to 55% for both.

Comparison of the parents indicated a similarity of 67% for RAPD markers, 62% for SSR markers, and 67% for both. This is similar to a previous study that reported the similarity coefficient at 66%. Although inbreeding exists within the population, the level of heterozygosity is high. Also, evidence of tetrasomic inheritance was uncovered within the molecular marker analysis. This population will be used to identify potential markers linked to both morphological traits of interest. Further genetic linkage analysis and mapping is needed to identify any putative markers

Presenters: Submit abstracts to Chair at meeting or email by date announced by Chair.

Chairs: Submit all the abstracts from your Section as a group to:

Managing Editor, HortScience

E-mail: ashs@ashs.org

Deadline: Submit by March 1st