

The Impact of New DNA Marker Technologies on Tomato Breeding

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In the past few years, agricultural genomics has evolved dramatically due to the impact of Single Nucleotide Polymorphisms (SNPs). These markers allow for higher throughput, lower cost and much greater resolution in regards to mapping, fingerprinting and trait selection. DNA LandMarks has been very involved in advancing SNP marker technology for tomatoes. The company led a consortium of breeding companies to validate over 1,000 new SNP markers in tomato. It has also successfully converted popular trait-linked markers from older, assays to much more efficient SNP based technologies. The development of SNPs and their application in marker programs is opening new opportunities to breeders in many crops including tomato.