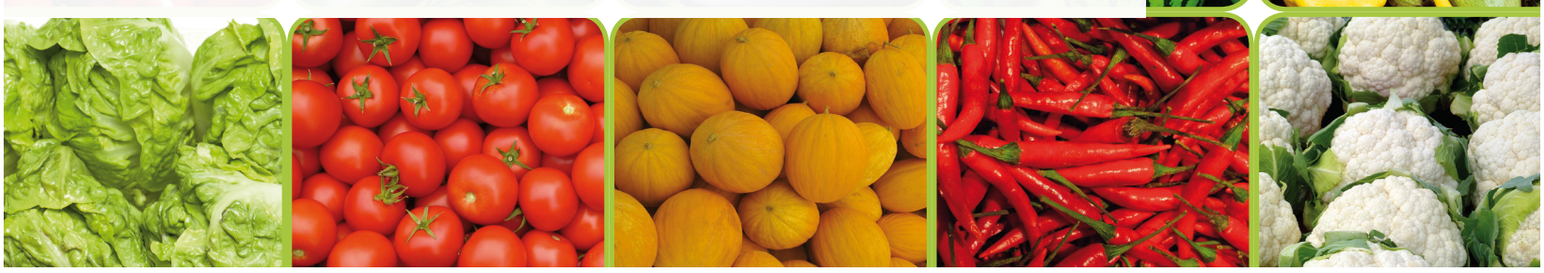
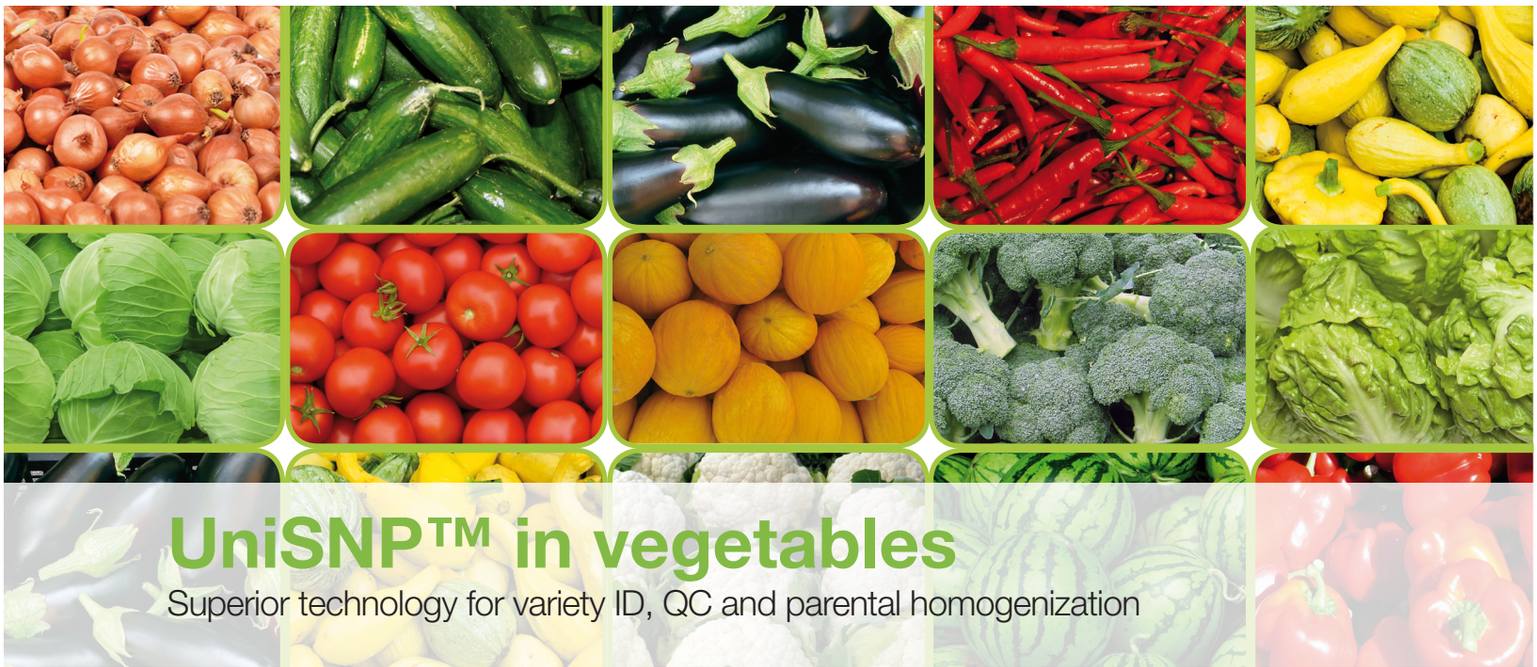
UniSNP™ in vegetables

Superior technology for variety ID, QC and parental homogenization

incotec
the seed enhancement company
Part of Croda International Plc

In the production of high value seeds, confirming the correct variety and identification of the amount of female selfing (inbreds) and off-types in a seed lot is an elementary and routine quality control procedure. Furthermore, selection of homozygous plants allows you to increase your breeding and improve quality. The most advanced molecular technology for doing this is Single Nucleotide Polymorphism markers (SNPs). From varieties supplied by customers, KeyGene and Incotec have identified 48 highly polymorphic SNP markers from a global germplasm and a a subset of 16 SNP markers used for quality control. This UniSNP™ set is one of a kind and is already available for tomato, pepper (hot & sweet), melon, watermelon, lettuce, eggplant, cucumber, squash (C. pepo only), brassica (cabbage, cauliflower, broccoli) and onion (variety verification). Incotec provides this rocksolid technique at an affordable price.





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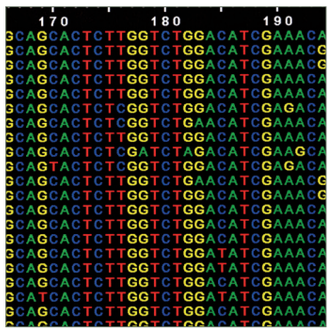
Universally applicable

The UniSNP™ set can be used for several purposes.

- Variety identification: the selected set is large enough to distinguish between a virtually unlimited number of varieties. This will give certainty regarding the identity of each seed lot produced.
- Hybrid purity testing: selected SNPs from this set (which will be identified for each specific variety) will be used to perform hybrid purity testing, whereby both inbreds and off-types can be identified.
- Open Pollinated purity testing: we will use the 16 SNP set to validate the identity and the quality of OP productions
- Purifying your parental lines: our set can support you in generating homogeneous parental lines by searching for homozygous positions and disregarding heterozygous positions. Using this molecular tool to help with your breeding program can carve out a few generations in your breeding program, saving you several years.
- The set can also be used in backcrossing or many other kinds of breeding where the selection of homozygous plants is elementary.

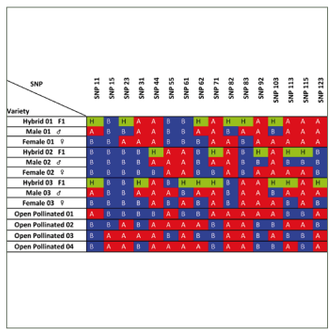


Unique SNPs

UniSNP™ is the only one of its kind. This is due to three factors: the way the development of the SNPs is organized, KeyGene's SNPs and the software models used to select the most useful markers. Over the coming years we will be developing many more crop-specific SNP sets. These will become available one by one as they are developed. We invite you to try UniSNPTM to see what this technology can do for you.

United efforts from customers, KeyGene and Incotec

In order for us to be able to develop SNP markers that would be effective on a worldwide germplasm, we had to test a huge set of SNPs to validate those on varieties from all around the globe. This required our customers to provide us with many different varieties, which would represent a wide genetic germplasm. KeyGene's role was to identify potential SNPs that might work regardless of whether genetic background is closely related or very divers. Incotec has been guiding this process, developing methods to extract DNA efficiently from seed and leaf material and has control over the laboratory analyses. The final selection of the 48 and 16 SNP sets was carried out by KeyGene. We are constantly looking for opportunities to develop new SNP sets; let us know if you would like to participate in one of our new projects.



Shipping made easy

Our lab has been accredited the Exemption 2008/61/EG status, which means that no phytosanitairy certificates are required. We will provide you with shipping instructions. Contact us for information about our services and competitive pricing.