

PLANT AGRIGENOMICS SPOTLIGHT

Genomics Solutions for
Improved CROP breeding and
performance

One Partner. For Any Application.

The future of food is changing.

The most pressing challenges for the agriculture industry is to respond to the increasing demand for safe, affordable and sustainable food production.

Agriculture and crop breeding can contribute to meet this rise, but will require industry-specific solutions to help maximize productivity and ensure long term food security.

Eurofins Genomics has over 20 years' experience in developing custom assays and methodologies for breeding and quality screening applications across different crops and plants. Today, we provide solutions to a broad range of agriculture organizations to support them increase productivity and safety.

Marker Discovery – Your Way To Advance

We offer a range of genome and transcriptome-based analyses to help you identify novel variants linked to higher yields, growth rate, disease resistance and environmental hardiness. We provide unparalleled flexibility and scalability to address even the most challenging of vegetables, fruits grains

and legumes.

To complement these capabilities, we have partnered with dedicated Bio-IT specialists that can turn sequence data into customised selection tools for downstream breeding programs.

Optimise Breeding And Selection

Microarrays can be used to screen hundreds of thousands of specific genetic markers.

As certified service provider, we offer array designs for vegetable species such as Cucumber, Lettuce, Spinach, Tomato or grains like Corn, rapeseed and wheat.

We also develop custom arrays tailored to your needs in any species of interest.

In addition, our NGS platforms are also perfectly suited for low cost, high throughput marker-assisted selection using our proprietary genotyping-by-sequencing (GBS) technology.



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Unlocking Nature's Secrets, One Gene at a Time!

Microarrays can readily be customized to your needs. We support the identification and combination of multispecies SNP lists. Oftentime this journey starts with the recognition of key marker-trait associations in your breeding population using a range of discovery platforms. Our NGS facilities offer Whole genome sequencing, Reduced representation Library sequencing (GRAS-Di) and RNAseq. Our Agrigenomics bioinformatics teams

can help with marker selection for downstream applications.

With any molecular application, it is essential to Start with high quality nucleic acids. We can provide DNA or RNA extraction from any type of plant tissue such as leaves, seeds, roots or stems.

Our team of Extraction specialists are available to discuss the needs of your selection or screening application.

Nurturing Nature's Best: Metagenomics & Microbiome insights!

Understanding the role of microbes in nutrition and environmental conditioning plays a pivotal role in the success of any classic or marker assisted breeding program.

The plants microbiome is impacting all aspects of its health and influences the quality of the end product. We offer both metabarcoding and metagenomics solutions for analysis of microbiome diversity or environmental DNA studies.

Our specialist teams can help you to design the most effective strategy for any type of sample or study objective.

**Contact us to discuss
how we can help you reach your
breeding goals!**

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Cultivating Tomorrow's Harvest with Precision Genetics!

