**NRGene and International Researchers Team to Map Key Wheat Genome**

*Hardier varieties key to securing world food supply*

Ness Ziona and Tel Aviv, Israel – March 10, 2015 – NRGene has joined forces with noted researchers around the globe – and is seeking more participants - to decode the genome of wild emmer wheat. This variety of wheat is the immediate progenitor of most cultivated varieties, which makes it an important genetic resource for crop improvement.

Assaf Distelfeld, PhD, of Tel Aviv University (TAU) is a known wheat geneticist and one of the primary researchers in the project. "The sequenced genome is a very important resource that will link genetic data and plant performance in the field. When we have this information, we can better engineer the seeds and get higher yields, better grain quality and nutritional value, and plants that are resistant to diseases and better adapted to their growing environments," said Dr. Distelfeld. "Sequencing the wild wheat genome will advance wheat research and facilitate the genetic identification necessary for continuing wheat improvement."

Genome assembly will be performed by NRGene using its DeNovoMAGIC™ assembler that produces long, accurate and phased scaffolds in remarkably short time frames. Assemblies that had taken years are achieved in weeks or months. Anchoring of the wheat scaffolds will be done with the ultra-dense genetic map developed in a collaboration between Dr. Distelfeld's laboratory and NRGene. The project is projected to be completed in about six months despite posing a significant computational challenge: the wild emmer wheat genome is huge, 12 Gb, which is approximately 54,000 books, assuming 200 pages per book, 30 rice genomes, or four human genomes.

"We always completely dedicate ourselves to any project, but this one is of great international importance and also holds special significance for us," said Dr. Gil Ronen, CEO, NRGene. "Wild emmer wheat was discovered by Aharon Aaronsohn in Rosh Pina in 1906. Now, it's poised to provide genetic data that can dramatically enhance the world food supply. Israel has long led the world in agricultural development, from drip irrigation to development of some of the hardiest, healthiest and tastiest varieties of produce on the planet. With NRGene's technology, we're unlocking the secrets of our success and sharing them with the world."

Researchers participating in the program represent leading universities in Israel and across the globe, including Hebrew University, Weizmann Institute of Science, University of Haifa, Ben Gurion University, and the Volcani Institute for Agricultural Research in Israel; Sabanci University in Turkey; and Leibniz Institute of Plant Genetics and Crop Plant Research (IPK) in Germany.

**About NRGene**

NRGene is a genomic big data company developing cutting-edge software and algorithms to reveal the complexity and diversity of plants and animals for the most advanced computational breeding. NRGene tools are already been employed by some of the leading seed companies as well the most influential teams in academics. NRGene is located in Ness Ziona, Israel. nrgene.com

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