

PlantArcBio and Tel Aviv University Collaborate to develop Innovative RNAi-based Biological Solutions for Agriculture

PlantArcBio and Tel Aviv University to Collaborate in a First-of-its-kind Study to develop Innovative RNAi-based Biological Solutions for Agriculture



GIVAT HEN AND TEL AVIV, ISRAEL, March 10, 2022 /EINPresswire.com/ --<u>PlantArcBio</u> Ltd. (TASE: PLNT), an agdsRNA Molecule

biotech company engaged in research and development in the field of gene discovery and biological components for improving plant traits, intended primarily for use in the global agricultural industry, and Ramot, the Technology Transfer Company of Tel Aviv University, signed a collaboration agreement. The companies will collaborate in a first-of-its-kind joint study, combining PlantArcBio's RNAi technology with the unique lipid-based RNA delivery technology developed by Prof. Dan Peer. Prof. Peer is TAU's Vice President for R&D , and a pioneer using RNA to manipulate cells in cancer and other immune related diseases. The ultimate goal of the collaboration is to develop a range of RNAi-based products for agricultural uses.

RNAi technology enables a temporary external disruption of RNA molecules, diminishing the amount of mRNA, and thus temporarily reducing the expression of specific genes, without modifying or genetically engineering the organism's DNA. PlantArcBio signed four agreements for development and commercialization in this field, including insect and pest control and crop improvement products. The company's strategic partners include ICL, Gadot-Agro, TMG and Seach Medical. To the best of its knowledge, PlantArcBio is one of the world's leaders and pioneers in developing RNAi-based products for agriculture.

The joint study will examine the efficacy of PlantArcBio's RNAi technology for agriculture, combined with Prof. Peer's RNA delivery based on unique lipid molecules. Specifically, the research will focus on testing the joint technology's contribution to the stability of RNAi-based products and their ability to penetrate plants and insects. Research will be carried out both at PlantArcBio's Laboratories and at Prof. Dan Peer's Laboratory of Precision NanoMedicine at Tel Aviv University.

Prof. Dan Peer, Vice President for Research and Development, and Head of the Center for

Translational Medicine at Tel Aviv University: "We are pleased to partner with PlantArcBio and its breakthrough RNAi technology. This collaboration will allow us to evaluate the synergy between our respective technologies as well as the possibility for expanding the applications of our RNA delivery technology to the agricultural arena. We see great value in contributing to the development of RNAi-based products addressing global issues and providing an ecological and environmentally friendly solution to the global challenges of sustainability in agriculture and food security."

Keren Primor Cohen, CEO of Ramot: "Ramot, the technology transfer company of Tel Aviv University, has filed multiple patent applications to protect the RNA delivery technology and its applications. We believe that there is extensive commercial potential for this combined technology and welcome the collaboration with PlantArcBio, which aims to provide a pioneering solution to a crucial global challenge."

Dror Shalitin, founder and CEO of PlantArcBio: "It is an honor for us to partner with Ramot, and with Prof. Dan Peer, a world-renowned scientist in the field of RNA. We see this as an additional stamp of approval for our unique and innovative RNAi technology. We look forward to the results of the newly launched study, expected within approximately 12 months."

About Ramot and Prof. Dan Peer

Prof. Dan Peer is a pioneer in the use of RNA molecules for therapeutics. His lab was the first to demonstrate systemic delivery of mRNA molecules for various applications, including vaccines, gene silencing, gene editing and increasing gene expression and therapeutic proteins. Peer and his lab have developed new unique lipids that carry mRNA and other types of RNA molecules, some of which have already been commercialized.

Peer is involved in the development of vaccines, drugs for various diseases such as inflammatory bowel disease, leukemia, brain and ovarian cancers, and more.

About Ramot

Ramot is Tel Aviv University's Technology Transfer Company. Ramot fosters, initiates, leads, and manages the transfer of new technologies from university laboratories to the marketplace by performing all activities relating to the protection and commercialization of inventions and discoveries made by researchers. Ramot provides a dynamic interface connecting industry to leading-edge science and innovation, offering new business opportunities in a broad range of emerging markets.

For more information visit www.ramot.org

About PlantArcBio

PlantArcBio Ltd. (TASE:PLNT) is an Ag-biotech company engaged in research and development in the field of gene discovery and biological components for improving plant traits, intended primarily for use in the agricultural industry, with a vision of enhancing global food security and

supporting sustainable agriculture.

Using DIP[™] - a unique process it has developed to discover genes that enhance various target traits desired for selected plant varieties - the company detects new genes that have beneficial effects on plants, such as insect resistance, improved yield, drought resistance and herbicide tolerance.

DIP[™] enables the testing of millions of genes in plants in real time – a significantly faster and more effective process for discovering genes with target traits, with much greater chances of success, compared to most gene detection processes used today – which employ theoretical computational platforms to identify the right genes, and only then proceed to testing in real plants.

PlantArcBio's portfolio comprises a range of products in various stages of research and development, under three product families: (1) World-leading development of RNAi-based products (biological molecules), including pest control and crop enhancement solutions - an area in which PlantArcBio is one of the leading companies In the world, by discovering and manipulating genes; (2) Discovering genes for the seed industry to enhance desirable traits in plants; (3) Discovering and using genes for the cannabis industry, through holdings in Targene (together with cannabis company Seach Medical).

PlantArcBio's global strategic partners include ICL, Gadot-Agro, KWS – a leading American seed company, TMG in Brazil, Bio-ceres in Argentina, Rallis (a subsidiary of TATA) in India, and another American seed company.

For more details, please visit the company's website: <u>www.plantarcbio.com</u>

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