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IRRI licenses CRISPR technology from Broad Institute and Corteva Agriscience

IRRI enters into a non-exclusive research and development (R&D) License Agreement with Broad Institute and Corteva Agriscience™ to access their proprietary CRISPR technology

The International Rice Research Institute (IRRI), a member of the CGIAR, has entered into a royalty-free, non-exclusive, non-transferable and non-sublicensable license agreement with the Broad Institute of MIT and Harvard (Broad), and Pioneer Hi-Bred International, Inc. (Pioneer), now part of Corteva Agriscience™, to use Broad and Pioneer's CRISPR-Cas9 gene editing technologies in IRRI's R&D activities.

Genome editing (GE) is a powerful technology for rice improvement which can drastically reduce time and money in rice research programs testing proof of putative gene function in upstream research increasing accuracy, and reducing time in rice breeding programs for higher yield, nutritional quality, and tolerance to biotic and abiotic stresses. In recent years IRRI has become a leader in the use of GE for rice science and rice breeding, towards developing robust proof of concept. IRRI's Genome Edited-related R&D activities include the Healthier Rice Program (http://books.irri.org/Healthier_Rice_Varieties_brochure.pdf), and the pyramiding of consumer traits with producer traits, towards promoting sustainable rice farming.

The licensing of this Genome Editing technology will accelerate IRRI's research and facilitate the development of improved rice varieties that will benefit rice growers.

The same technology is not currently available from other providers under less restrictive conditions.

This new license builds on previous agreements between Corteva Agriscience™ and IRRI, adding access to new tools to an already fruitful collaboration.

The Broad Institute, MIT and Harvard share the goal of developing innovative technologies such as CRISPR genome editing tools and promoting its translation to benefit breeders and farmers (see <https://www.broadinstitute.org/news/licensing-crispr-agriculture-policy-considerations>) as

well as patients in medical research (see <https://www.broadinstitute.org/partnerships/office-strategic-alliances-and-partnering/information-about-licensing-crispr-genome-edited>).

“This important agreement will further advance IRRI’s genome editing research activities, contributing towards the development of science-based solutions that will benefit rice producers and consumers, as well as enhancing global food and nutrition security,” said Remy Bitoun, Head of IRRI Tech Transfer.

IRRI has been granted a non-exclusive R&D license to use Broad and Pioneer’s genome editing technologies for research and non-commercial use, with the right to subcontract. Additional rights for dissemination would necessitate an additional agreement with Broad and Pioneer. Such additional agreement will be in full compliance with the CGIAR Intellectual Assets Principles (<https://storage.googleapis.com/cgiarorg/2018/03/CGIAR-IA-Principles.pdf>). In addition, future licensing of genome-edited products developed by IRRI using this license will reflect the monetary benefit-sharing obligations of the Plant Treaty.

IRRI, as the recipient of the proprietary gene editing technology, will comply with all applicable laws and regulations in countries where the research and development activities will be conducted. These laws and regulations include stewardship, environmental impact, import, export, handling, storage, use, testing, and disposal of all genetically edited materials. Products of these genetic editing technologies are treated with the same care as how IRRI handles genetically modified products, as per the currently applicable national regulations.

IRRI recently became a regular member of the Excellence Through Stewardship (ETS) global initiative and has passed certification of 3rd party stewardship audit (see www.excellencethroughstewardship.org/successful-audits).

This licensing agreement has no bearing on the facilitated free and open access to in-trust accessions for everyone.

IRRI, as a non-profit international organization, promotes responsible technology transfer in accordance with its Intellectual Property and Commercialization Policy (IP&C Policy)¹ and with the CGIAR Principles on the Management of Intellectual Assets (“IA Principles”)², Open Access and Data Policy. This Research License Agreement may lead to Restricted Use Agreement (RUA, as described in the IA Principles) in the future. RUAs entail acquisition and use of third party intellectual assets that may restrict global accessibility of the products and services resulting from their use.

¹ Available at <http://books.irri.org/Approved-IPC-Policy-291017.pdf>

² Available at

<https://cgspace.cgiar.org/bitstream/handle/10947/4486/CGIAR%20IA%20Principles.pdf?sequence=5>

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