BioSpectrum the business of Bio & Health Sciences

Dupont's GM rice hybrids get GEAC nod for field trials

04 November 2010 | News

Image not found or type unknown

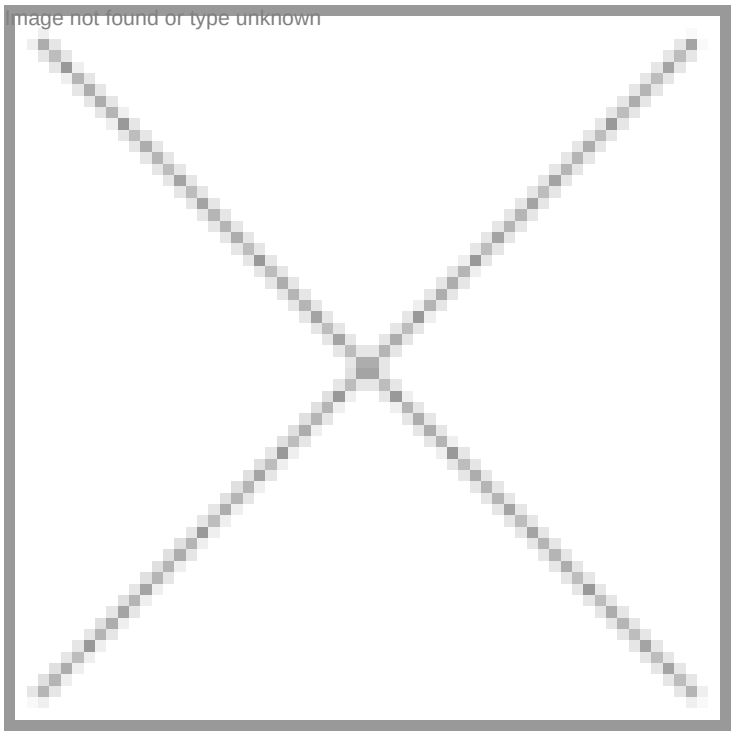
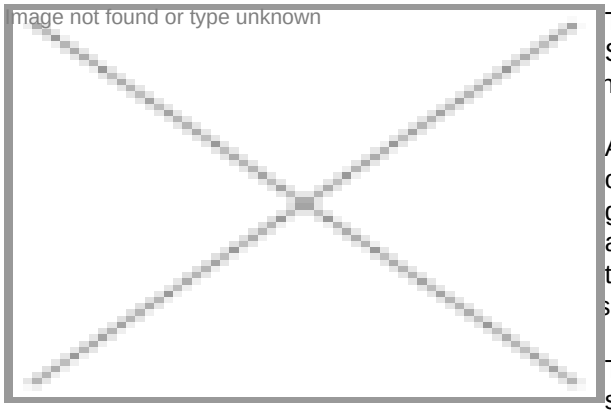


Image not found or type unknown



The Genetic Engineering Appraisal Committee (GEAC) that met on September 29, 2010, permitted confined field trial for event selection on nter, Hyderabad.

After detailed deliberation, the regulatory body approved the proposal for only experimental event selection trials, during which the applicant will generate detailed information on molecular data on expression for alpha amylase in different tissues; data on segregation of transgenic; and non-transgenic seeds in 1:1 ratio, and a validated seed sorting mechanism for s will be developed.

The committee gave permission to conduct confined field trial for event selection on transgenic rice events (Hybrid Rice SPT maintainer events) generated using the SPT1 and SPT6 m constructs by Dupont Knowledge Center, Hyderabad. It also allowed the company to conduct event selection trials on transgenic rice events (Hybrid Rice SPT maintainer events) generated using the SPT1 construct.

The events generated using SPT1 construct namely; JH 15b, JH 16a, JH 16b, JH 17, JH 25b, JH 26a, JH 36 of BC3 containing ZM-AA1-Os-MSCA1-DsRED2 genes and SPT6 construct namely; J6-1-45a, J6-1-8, J6-1-4d, J6-1-10b, J6-1-7d containing Os-MSCA1-ZM-AA1-DsRED2 genes will be evaluated.

The event selection trials will be conducted within the company's owned land/research farm in Bangalore, with the following reproductive isolation measures are proposed: 200 m isolation distance from the last row of transgenic plant on all four sides

will be maintained, with eight feet tall polythene sheets as barriers between each event.

During the deliberations, the committee noted the following points: these events were developed by transforming M2O2 X T65 lines and then back-crossed into VIR54G9. All events are single copy events. This technology enables maintenance of male sterile, female parental lines for use in hybrid seed production. The present proposal pertains to hybrid rice seed production technology (SPT). It is a process that facilitates large scale production of non-genetically modified male sterile rice lines that can be used as female inbred parents, for subsequent hybrid seed production.

The committee was of the view that the above technology being a relatively a new one, a detailed presentation from the applicant would be useful in understanding the genetic elements of the gene construct, molecular data on expression for alpha amylase in different tissues and data on segregation and sorting of transgenic and non-transgenic rice seeds.

The committee further opined that the decision on the next phase of trial (BRL-I) will be based on the data generated by the applicant during event selection trials, and over-all policy on the issue of markers in transgenic plants.

Earlier, the Institutional Biosafety committee (IBSC) in its sixth meeting held on July 9, 2010 approved the proposal. The proposal was also recommended by the Review Committee on Genetic Manipulation (RCGM) at its 91st meeting held on July 27, 2010.

India to raise 177 crore for OSDD

Image not found or type unknown

The Open Source Drug Discovery (OSDD) project of Council for Scientific & Industrial Research (CSIR) is set to receive another financial boost. While pledging support of the government to innovation, Prime Minister of India, Dr Manmohan Singh emphasized that government is committed to raise around `177 crore in funding for OSDD, from international agencies and philanthropists.

OSDD facilitates collaboration by providing a platform for mutual sharing of research results, that may be used freely by any participant. The project has already made available the complete sequencing of the Mycobacterium tuberculosis genome.

Dr Singh while lauding the efforts of CSIR said, “We believe that institutions like CSIR have to play a catalytic role in this area. Our government is establishing an Academy of Scientific and Innovative Research, that will use the infrastructure of the CSIR to impart cutting-edge research training in frontier areas of science and engineering, that are not ordinarily taught elsewhere.

On participation of the private sector in research, Dr Singh said, “If we are to give meaning to our search for new frontiers in Indian science, then a much larger participation of the private sector is also essential. We have to leverage the private sector’s strengths by creating high impact collaborations with public institutions in their translation and transformational efforts.

Dr Singh agreed that there is a need to increase the expenditure on S&T, as a proportion of the overall GDP of the country. He also emphasized on the need to address issues related to sharing of intellectual property rights.

Indo-German collaboration in life sciences

The Council of Scientific & Industrial Research (CSIR), Ministry of Science & Technology (S&T), Government of India, New Delhi, and the International Bureau of the German Federal Ministry of Education and Research (IB/BMBF at DLR), Bonn, Germany, have invited proposals from academia and industry in Germany and India; to collaborate in various areas of science and technology including life sciences. The areas in life sciences covered under the program are biotechnology, genomics, proteomics, and synthetic biology (possible focus on bioeconomy).

The program facilitates bilateral cooperation in the fields of science and engineering between the research institutes of CSIR, India, and those of Germany, by way of joint research projects, bilateral workshops/seminars, exchange visits of scientists and scientific and composite (scientific and industrial) delegations.

From the Indian side, scientists working in regular capacity in CSIR research institutes; and from the German side, scientists and faculty members working in regular capacity in public or private R&D institutes can apply under this program. The Indian industrial partner can participate in the program, but the project applicant would be a CSIR scientist only. The Indian company will have to meet its own project implementation cost. The participation of German companies has also been sought, however, financing is limited. The project duration is limited to two years, and expendable by one year.

The evaluation and selection criteria includes the relevance to German and Indian national research program and multinational program (like EU-programs). The new projects are in applied fields of mutual benefit, and having justification for

collaboration along with quality and originality of research approach.

The applications from India and Germany were accepted at the respective offices of CSIR and IB/BMBF till October 31,2010. The short-listing of selected projects would be completed by January 2011, and the projects will start in April 2011.

Strand releases Avadis NGS software

Strand Scientific Intelligence, a wholly-owned subsidiary of India's Strand Life Sciences, has released Avadis NGS, a software application for next-generation sequence analysis. Avadis NGS helps biologists visualize and perform downstream analysis on their NGS data, simply on a desktop computer.

Avadis NGS is an application based on ChIP-SEQ, RNA-SEQ and genetic variation analysis that enables its users to assimilate large amounts of NGS data and ascertain deep biological insights using powerful statistics, interactive data visualizations in a state-of-the-art genome browser, and downstream analyses.

François Mandeville, executive vice president of Strand Scientific Intelligence, said, "Avadis NGS represents a major milestone in NGS, and finally shifts the power of analysis from information technology and informatics experts to the biologists."

Avadis NGS is built on Strand's award-winning scientific intelligence platform, Avadis, for data analysis and visualization.The Avadis platform has enabled rapid development of software for life and health sciences applications such as Agilent Technologies' GeneSpring and powered breakthrough scientific discoveries by seven of the top 10 global pharmaceutical companies.

India, Russia to explore pharma, biopharma sectors

India and Russia have agreed to explore the possibility of setting up joint ventures in pharma and biopharma sectors, APIand therapeutic specific sector in both countries, including joint setting up of R&D/testing facilities. They have also agreed to exchange technical know-how for production of pharma products including bulk drugs, serums, biosimilars and vaccines, participation in setting up of enterprises for scientific and production capacity. This was decided during a meeting between the Indian delegation, led by Mukul Joshi, secretary, Department of Pharmaceuticals, Government of India, and Russian delegation led by Russian Minister for Industry and Trade, Victor B Khristenko on September 29, 2010.

Jubilant Organosys is now Jubilant Life Sciences

Jubilant Organosys, an integrated pharmaceutical and life sciences company headquartered in New Delhi, has changed its name to Jubilant Life Sciences.
Commenting on the development, Shyam S Bhartia, chairman & managing director said, "Almost a decade ago, we had stepped onto this path of transformation, and today, we have successfully positioned ourselves as a life sciences company, with a presence across the value chain."

With this change, Jubilant Life Sciences becomes the flagship company of pharma and life sciences business of the Jubilant Bhartia Group which also has interests in food and retail, oil and gas and aerospace.