

In 'The Future' section of the 2019 Australian Sugarcane Annual we referred to earlier work done by SRA researchers to develop 'synthetic seed' planting technology. Faced with local technical and cost challenges at that time, SRA put the project on hold. But we further noted that SRA was monitoring new technologies in the synthetic seed space and investigating whether these technologies are suitable for Australia. The Future has become The Now.

New planting technology for Australian cane industry

NEW Energy Farms (NEF) and Sugar Research Australia (SRA) recently announced they have entered into a License Agreement to undertake research and development to introduce the NEF CEEDS technology into the Australian sugarcane industry.

NEF is a crop technology company, established in 2010, to develop artificial seeds for crops that do not produce conventional seeds, such as sugarcane.

NEF developed and patented the unique and disruptive CEEDS technology for the multiplication and planting of sugarcane crops worldwide. CEEDS are small coated propagules directly drilled in the field like conventional seed. NEF have already licensed CEEDS for commercial sugarcane use in other key sugarcane markets including Brazil and Central America.

The collaboration will utilise NEF's extensive CEEDS experience in propagation of perennial grasses, in sugarcane and other high biomass crops like Miscanthus and energy cane. Testing will commence this season to evaluate the response of current and emerging Australian varieties in the production of CEEDS artificial seed. Subsequent trials will examine germination, plant establishment and crop performance under a range of Australian production conditions.

"Establishing the crop is a major cost in sugarcane production. The value of just the sugarcane used for planting is around \$25 million every year. New approaches in planting systems to release this industry value have been research topics before, but recent technological advances suggest it could now become a reality," explained SRA Executive Manager for Variety Development and Processing, Dr Jason Eglinton.

"This work will produce an understanding of the benefits and costs of the technology to inform potential adoption pathways. CEEDS also offers indirect benefits including the ability for growers to more rapidly change their variety mix and control of issues such as Ratoon Stunting Disease."

The Agreement will allow NEF to provide SRA with patented CEEDS technology to produce artificial seeds for the current, and future, sugarcane varieties in the Australian market. "We are extremely pleased to have entered this License Agreement with SRA and we are very aware of the high level of respect in Australia and the wider sugarcane industry for their research and



Dr Paul Carver, CEO of New Energy Farms.



CEEDS propagules – The primed plant material, in its protective coat, with its targeted crop protection products and growth promoters (if desired) is about the size of a potato and can be planted with automated planters.

technology transfer activities," said Dr Paul Carver, CEO of New Energy Farms.

For more information
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