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NEW VARIETIES APPROVED FOR 2019



Eleven new varieties of sugarcane have been approved for sugarcane growers and millers across the industry following Regional Variety Committee (RVC) meetings earlier this year.

These varieties have been created as a result of extensive work through the SRA plant breeding program and more than a decade of development. They have been developed to maximise profitability for sugarcane growers and millers by optimising characteristics such as tonnes of cane, sugar content, resistance to diseases, and ability to be processed within the mill.

NEW SOUTH WALES

The NSW RVC approved the new variety WSRA18^{ph} (seedling number: KQB07-34350) and the Southern Region variety SRA11^{ph} (seedling number: QS05-6092).

SRA11^{ph} is available as a one-year and two-year variety. In trials, it had fast, reliable germination and good disease resistance. It is resistant to Pachymetra root rot, Fiji Leaf Gall, Leaf Scald, Mosaic and intermediate resistant to Red Rot.

WSRA18^{ph} is a result of joint breeding work between SRA and Wilmar Sugar, via its program based in the Burdekin region. It has been approved for release as a two-year variety.

This variety has resistance to Fiji Leaf Gall, Leaf Scald, Mosaic and Red Rot, and has an intermediate rating for smut and Pachymetra. It has been released specifically for NSW two-year cane production, where it has shown moderate commercial cane sugar (CCS) but excellent tonnes of cane per hectare (TCH), giving competitive productivity across a range of field trials.

Harwood grower Alan Munro is part of the NSW RVC and he said that the region was looking for new varieties that offer good disease resistance and productivity through tonnes and sugar content.

"Frost is also an issue for us. Most of our crops are grown as two-year crops, but if the cane gets frosted at one-year then we want to be able to harvest the crop in that situation and know there will be sugar there," Mr Munro said.

"We have seen this improve with recent varieties for our region, so we look forward to better understanding how WSRA18^{ph} and SRA11^{ph} fit into the mix."

SOUTHERN

The Southern RVC approved the varieties SRA19^{ph} (seedling number: QN02-1707)

and SRA20^{ph} (seedling number: QS07-8815).

SRA Senior Plant Breeder, Roy Parfitt, said SRA19^{ph} was a top-performing variety in SRA trials with moderate to high tonnes and moderate CCS.

It is classified as resistant to Pachymetra root rot and Leaf Scald, as well as intermediate resistant to smut and Fiji Leaf Gall, all of which are important diseases in the Southern Region.

"SRA20^{ph} also performed well in our trials and produced high tonnes and moderate CCS. It had reliable germination and good resistance to diseases including smut and Pachymetra root rot, and intermediate resistance to Fiji Leaf Gall and Leaf Scald," Mr Parfitt said.

The Southern Region encompasses the Wide Bay region including Bundaberg, Childers and Maryborough, and extends to the Sunshine Coast and the Rocky Point areas.

Hervey Bay grower Ashley Petersen has trials with the varieties on his property and said both these varieties, as well as SRA11^{ph} that was released last year, looked promising.

"We're farming on a dual-row controlled-traffic system, so it is essential that our varieties are nice upright cane. These varieties look to be standing up well so we will assess them further as they move through the system," Mr Petersen said. "SRA11^{ph} is so far looking good in a range of conditions."

CENTRAL

The Central RVC approved the varieties SRA21 (seedling number: QC05-316) and SRA22 (seedling number: QS04-772).

In trials, SRA21 had equal TCH and CCS compared to the average of the commercial standards, while SRA22 had higher TCH and CCS than the standards.

SRA22 has good resistance to Pachymetra root rot and sugarcane smut, while SRA21 has good resistance to smut and is resistant-intermediate to Pachymetra. Both SRA21 and SRA22 have acceptable milling characteristics.

Frank Perna is Chair of the local RVC and he said that from early data the varieties looked promising, with both SRA21 and SRA22 having good productivity traits.

"In the Central Region, as well as productivity characteristics, we need our varieties to be resistant to Pachymetra, which is the case for these varieties. We look forward to them making their way

through to commercial production, where we can assess how they perform," Mr Perna said.

SRA21 will be distributed to growers in 2019, and SRA22 in 2020. Both varieties are also available for ordering through tissue culture.

BURDEKIN

The Burdekin RVC approved the variety SRA23 (seedling number: QA07-2330). In SRA trials, SRA23 had similar performance to the average of the current major commercial varieties, including Q183^{ph}, Q208^{ph}, and KQ228^{ph}, in terms of tonnes and CCS.

It is available as tissue culture, and on a broader scale through Burdekin Productivity Services (BPS) in 2021.

Cane grower Kris Tasselli has a strip trial on his farm in collaboration with BPS where these trials looked at SRA23 and WSRA17^{ph} in commercial farming conditions.

"The strip trials with BPS help us have a good look at new varieties, and also compare them closely to established varieties like Q240^{ph}," Mr Tasselli said. "As growers we are obviously looking to maximise tonnes and sugar, so we are looking at how these new varieties perform in our conditions."

HERBERT

The Herbert RVC approved the release of the new variety SRA24 (seedling number: QA05-2486)

SRA24 is resistant to key diseases such as smut, Pachymetra root rot and Leaf Scald. In trials, it had average to above average yield when compared to a range of existing commercial varieties. It had average to below average CCS in comparison to these varieties, and has been noted to be a potential to mid to late CCS variety.

Herbert grower Robert Lyon said that local growers were looking for a good resistance to diseases such as smut and Pachymetra from new varieties, as well as ratoonability.

"SRA14^{ph} was approved for release last year and is looking good in its very early stages, and we will see how it goes this year as we plant more of it. We look forward to learning more about SRA24 from next year onwards," Mr Lyon said.

Growers will be able to access planting material of the new variety in 2020.

FAR NORTH QUEENSLAND

The FNQ RVC approved the new varieties SRA25 (seedling number: QN08-1898), SRA26 (seedling number: QN08-2282) and SRA27 (seedling number: QA04-1448).

In SRA trials, SRA25 was competitive with Q200^{ph} and Q208^{ph} for cane yield but lower in CCS. It has good disease resistance to most major diseases, being classified as resistant to Pachymetra and Leaf Scald, intermediate to smut, and susceptible to red rot.

SRA26 has excellent disease resistance to all the industry's major diseases, including smut, Pachymetra root rot, Leaf Scald and Red Rot. It performed strongly in comparison to the established commercial varieties Q200^{ph} and Q208^{ph} for yield and CCS across all sites and crop classes.

Chair of the Northern RVC Greg Shannon said that SRA25 and SRA26 should provide value to the Wet Tropics sugar industry due to their Pachymetra resistance. ■

REGION	VARIETY NAME	YEAR OF DISTRIBUTION
North	SRA27	2019
North	SRA26	2019
North	SRA25	2019
Herbert	SRA24	2019
Burdekin	SRA23	2021
Central	SRA22	2020
Central	SRA21	2019
South	SRA20 ^{ph}	2019
South	SRA19 ^{ph}	2019
NSW	WSRA18 ^{ph}	2020
NSW	SRA11 ^{ph}	2019

More information on these varieties, and other varieties, is available in the SRA 2019/20 Variety Guides, which have been sent in hardcopy to growers and are also available on the SRA website.