

Groundnut production: Cultivar evaluation and development are vital

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Groundnut production in South Africa has shown a significant decline over the past two decades. In the decade before the 2000/01 season, 92 935mt of groundnuts were produced on 113 725ha, with an average yield of 0,897mt/ha. The two decades since saw an increase in average yield to 1,13mt/ha, but hectares planted and yield declined to 56 318ha and 74 332mt, respectively (Figure 1).

Locally, the breeding of new groundnut cultivars could not keep up with growth in the development of new, higher-yielding cultivars of competing crops such as soya beans, maize, and sunflowers. These crops, which make a valuable contribution to the feed industry, are supported by local and international programmes which continuously make new genetics available to help producers realise greater financial rewards per hectare.

In addition, annual national trials and independent evaluations for these crops, supported by the Oilseeds Advisory Committee (OAC) and the Oil and Protein Seeds Development Trust (OPDT), provide

producers with valuable insights into cultivar choices and production decisions.

Evaluation highlights potential

Over the past few years, role-players in the groundnut industry have made substantial investments in cultivar selection and development as well as the evaluation of potential foreign cultivars. The OAC previously tested foreign cultivars in South Africa, but the results showed that locally bred, Spanish-type groundnuts performed better. The tests were subsequently terminated.

Producers and processing facilities have indicated that, despite the perception that there is not much in the line of new development, continuous groundnut evaluation and the information gathered from trials remain vital when considering planting decisions and future strategies. Although the trend is that trial yields cannot necessarily be replicated on a commercial scale, it does confirm the potential of specific cultivars.

Securing the industry's future

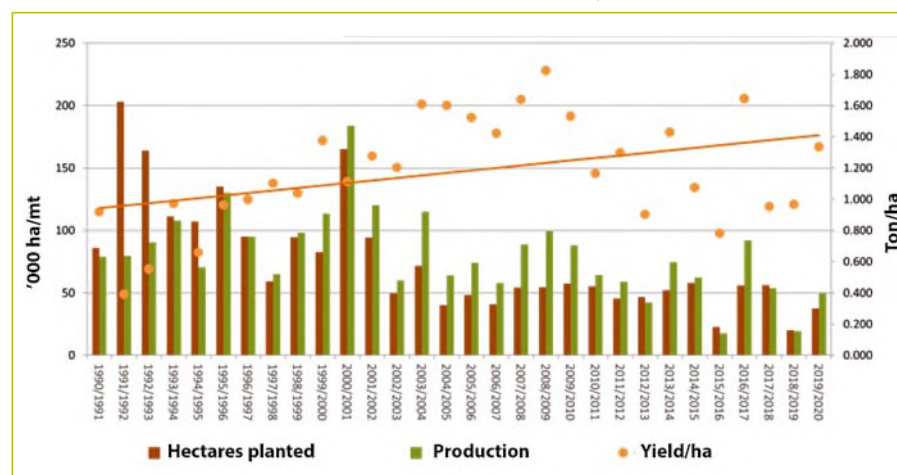
It takes approximately 14 years to develop a new, unique cultivar. In 2013

the Agricultural Research Council's (ARC) Grain Crops Institute registered two new groundnut cultivars, followed by two promising cultivars – Akwa Plus and Sellie Plus – two years later. These are now available commercially. Another two or three cultivars are currently in the pipeline, resulting in a total of six or seven new registrations in eight years.

To evaluate existing cultivars, as well as new ARC breeding lines, the industry has taken it upon itself to perform annual cultivar trials. This initiative, which takes place under the guidance of Lourens de Kock, vice-chairperson of the SA Groundnut Forum, is supported by several facilities and producers at own cost. The ARC supplies the seed and processes the data for publication and discussion at the annual cultivar meeting.

The ARC is currently the largest independent groundnut owner in South Africa and, for the sector to remain sustainable, it is crucial to ensure that the breeding and availability of ARC-registered seed is undertaken with industry input and support. Here, private initiatives have a crucial role to play in securing the future of the industry.

Figure 1: Groundnut hectares planted, production and yield from 1990 to 2020.



Latest evaluation

During the 2019/20 groundnut evaluation, ten registered cultivars – eight from the ARC and two from private companies – as well as eight potential ARC breeding lines, were successfully planted across five locations. Each area has a unique climate and soil type and is representative of the groundnut production areas in South Africa. Results from the trials are available from the SA Groundnut Forum. 🌱

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