



*Dr DL Milne*

## **A BRIEF REVIEW OF SAAGA 1981**

### **DL MILNE**

*General manager, Westfalia Estate and currently chairman of SAAGA's Management Committee.*

#### Tree Census

One of the highlights of the year has been the completion of the first tree census in 8 years. This has shown the following: Approximately 500 000 trees were planted between 1973 and 1981. This represents a doubling of the 1973 area, giving a total tree population of nearly 1 million trees.

Of the trees planted, 700 000 are Fuertes and of these only 380 000 are currently in bearing. However, in addition to the 320 000 nonbearing Fuerte trees, some 100 000 Mass trees have been planted, which are not yet in bearing. To summarize, over the next 5 years, 560 000 new trees will come into bearing.

However, based on the 1973 census, a number of trees have "disappeared" over the past 8 years. Part of this can be due to thinnings and part to urbanization, but Phytophthora root rot must take the major blame for these losses. It is conservatively estimated that this disease is costing the industry more than a million rand annually.

Fortunately South Africa has led the world in finding effective chemical control measures against Phytophthora and this has again placed the industry on a sound footing. Furthermore, the importation of resistant rootstocks such as Duke 6 & 7, G 6 and G 755 will all be of value in defeating this devastating disease.

SAAGA has negotiated with the University of California for the release of the latter two patented cultivars and they will be made available early in 1982. Together with the release of Pinkerton and Santana this marks the start of a new era in which SAAGA will play a more important role in controlling the quality of trees provided to growers.

Research on indexing for sunblotch is progressing well and as soon as a satisfactory method is finalized it will be possible for SAAGA to go ahead in earnest with a plant improvement programme in conjunction with the Department of Agriculture & Fisheries.

Coupled with the above development is the major research breakthrough reported on in this Yearbook; namely the successful in vitro cultivation of avocado tissue. If developed to its logical conclusion this process could enable us to free desirable budwood of viruses and also enable us to multiply new cultivars rapidly for distribution to nurserymen.

### **Exports 1981**

The 1981 crop was poor. The 1980 season had been a bumper crop and so some tree reaction was expected, but cold weather during flowering caused poor fruit set so that the crop volume was down by 30 to 40% in most areas. In addition, in the main producing areas, the season was one of heavy rainfall, high humidity, exceptional cloudiness and warm temperatures. All these conditions were favourable for disease development but not for avocado fruit growth. Consequently fruit arrived overseas with several internal and external problems.

Fortunately we had Eileen Kuschke, SAAGA's research officer, on the spot to monitor our fruit on arrival and so she was able to pinpoint some of our key problems such as pulp spot and anthracnose. The analysis of her data has also shown up certain gaps in our knowledge of factors affecting fruit quality. By monitoring fruit from specific production areas, subjected to specific treatments, during the coming season, it will be possible to identify our most urgent industry needs more accurately.

It soon became clear from Eileen's reports and from Ryan recorder readings, that there were certain problems in our cool chain. SAAGA therefore appointed consultants to carry out a quick survey of packhouses in order to identify key problems. From this survey it was clear that more effective cooling processes were required in a number of packhouses. Specific recommendations were therefore made to the industry in order to solve these problems.

During the course of the year SAAGA has continuously negotiated with the Perishable Products Export Control Board, the Railways, Inspection Services and the London and Paris Committees of SAAGA, in an effort to improve the cold chain. During January, further meetings will be held with these bodies in order to iron out problems before the coming season.

For the first time this year SAAGA obtained representation on the Perishable Products Export Control Board. This led to closer cooperation and also significant savings due to reductions in tariffs and levies, obtained by our representative, Mr FJ Lourens.

## **Staff**

The SAAGA staff now comprises the following:

Mr Nino Burelli: field officer  
Mrs. Eileen Kuschke: research officer (overseas)  
Miss Astrid Jennings: publicity officer  
Mrs. Yvonne Senekal: secretary  
Mrs. Veronica Scholtz: typist

In addition Prof JM Kotzé has acted on a consultancy basis as SAAGA's research coordinator. All other activities have been carried out on a voluntary basis.

It has been clear during the course of the year that further permanent technical and management staff is needed by the industry. As soon as these costs can be borne by SAAGA, such expansions should therefore take place.

## **Field officer**

The field officer has had a very active year, getting to know the industry, the areas, the growers and their problems. In addition he has carried out the tree census, coordinated the cold room survey, arranged numerous farmers' days, carried out oil analysis to coordinate with Eileen Kuschke's data and generally been a great help to the industry.

## **Research**

The amount of research carried out over the past year was exceptional, and valuable data was collected on root rot, anthracnose control, pulp spot, calcium applications, oil content of fruit, tissue culture and virus and bacterial diseases of avocado trees. Thanks are due to Prof JM Kotzé for coordinating SAAGA's research and to the CSFRI for their valuable contributions.

Details of this work are published in this Yearbook, but recommendations will also be published in SAAGA's magazine "Avokad".

## **Conclusion**

While it has been a difficult year for exporters, solutions have been found for many of our problems and we look forward to a bigger and better crop in 1982.