

SUNFLOWER PRODUCTION DEVELOPMENTS IN AUSTRALIA

By

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Australia is the only main wheat exporting Country in the World which is not self-sufficient in the production of vegetable oils.

Severe over-production of wheat in some areas in Australia has initiated a swing away from wheat into other crops.

It is anticipated, that after only two years of high oil sunflowers growing in Australia, a small exportable quantity could be available this year.

Due to the heavy pressure the over-production of wheat is putting onto prices for normal feed grains, oilseed crop production is a logical outlet for our broad acre farm production.

Safflower, Sunflower, Linseed and Rapeseed are all oilseed crops which appear adapted to some farming areas in Australia.

Safflower and Sunflower because of their premium oils and rather easy disposable meals are expected to be the main vegetable oilseed crops.

Sunflower as a vegetable oilseed crop only became of importance since the introduction into commercial use of varieties based on the Russian high oil sunflower varieties.

High oil sunflower acreages increased from 300 acres in 1968 to 35,000 acres in 1969 and 65,000 acres planted in 1970.

All commercial sunflower production in Australia is carried out under contractual arrangements with local oilseed crushers.

In order to be assured of good quality of a certain fixed quantity of material for crushing, heavy emphasis is put on obtaining irrigated sunflower crops.

This year, for the first time, large commercial areas of sunflower were grown in N.S.W. and both Queensland and N.S.W. are expected to produce equal tonnages of sunflower this year.

Of the total acreage -

- 15,000 acres are grown under irrigation in N.S.W.
- 3,000 acres are grown under irrigation in Queensland
- 7,000 acres dryland in N.S.W.
- 40,000 acres dryland in Queensland

Varietal material from Russia and the U. S. is used in a selection

programme to produce our present varieties.

Plant populations of approximately 30,000 per acre under rain grown and 60-70,000 per acre under irrigation have proved the best in row spacings of 28".

No important agronomic problems have shown up in the growing of sunflower in Australia. The crop appears well adapted over a wide range of soils and climatological conditions. In Queensland the crop can be planted nearly the year around, but two distinct planting times in early spring and mid summer have been found to be most practicable.

Yields were rather low last year as most of the crop was grown in Queensland under extreme drought conditions. Under average conditions, we would expect average dryland yields of 1/4 to 1/3 ton per acre and irrigation yields of 1/2 to 3/4 ton per acre.

Last year's average oil content was 38% but in a normal season we would expect an average of around 40% oil.

Regarding the quality of Australia's sunflower oil, we have found a similar relationship between the poly-unsaturated content of the oil and the latitude under which the crop is grown, as was reported in the U.S. In Australia the further south the crops are grown the higher the linoleic content of the oil.

The sunflower meal has found a market in the poultry feed industry, and has generally been well received in that market. Protein contents vary from 30-39%, of the present meals, with fiber content of 15 - 25%.

SUMMARIZING

It appears that Australia will become self-sufficient in vegetable oilseeds during 1970 or 1971.

Sunflower will play an important role in supplying Australian requirements for vegetable oilseeds and this crop may even become available in exportable quantities.

Sunflower is well adapted to a wide range of Australian conditions and this crop will no doubt become widely grown in this country.

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