Though harvesting of seeds at PM has been shown to have several advantages, this physiobiochemical study indicated some detrimental features. If changes occurring during the drying phase of seed are a preprogrammed part of the development, harvesting at PM might affect the maturation of the embryo. In the present study PM seeds were found to be inferior to HM seeds with respect to viability and germinability and under accelerated ageing. Hence in determining actual time of harvesting the question of complete ripening of the embryo should also be considered.

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IRRIGATED SUNFLOWER PRODUCTION FROM THE RED-BROWN SOILS OF NORTHERN VICTORIA.

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ABSTRACT

The irrigation areas of Northern Victoria produce half of Victoria's sunflower output. The product is a high quality oil with a low linoleic acid content. The soils in the irrigation areas of Northern Victoria are predominantly red-brown duplex types. A relatively fertile but shallow (100 mm) topsoil with an impermeable subsoil. The soil becomes structureless when irrigated and cement hard when dry. To overcome the problems of crop establishment and irrigation, growers have, with the aid of a vigorous extension service by the Department of Agriculture, Victoria, evolved a technique of obtaining yields in excess of 3 tonne per hectare with an oil percentage as high as 50%. The major techniques involved are the adoption of sowing hybrid cultivars with a precision planter on the flat at a plant density of 100,000 per hectare. Secondly, to irrigate frequently at 7 — 10 day intervals from bud stage to maturity, maintaing adequate soil moisture in a limited capacity shallow soil.

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