

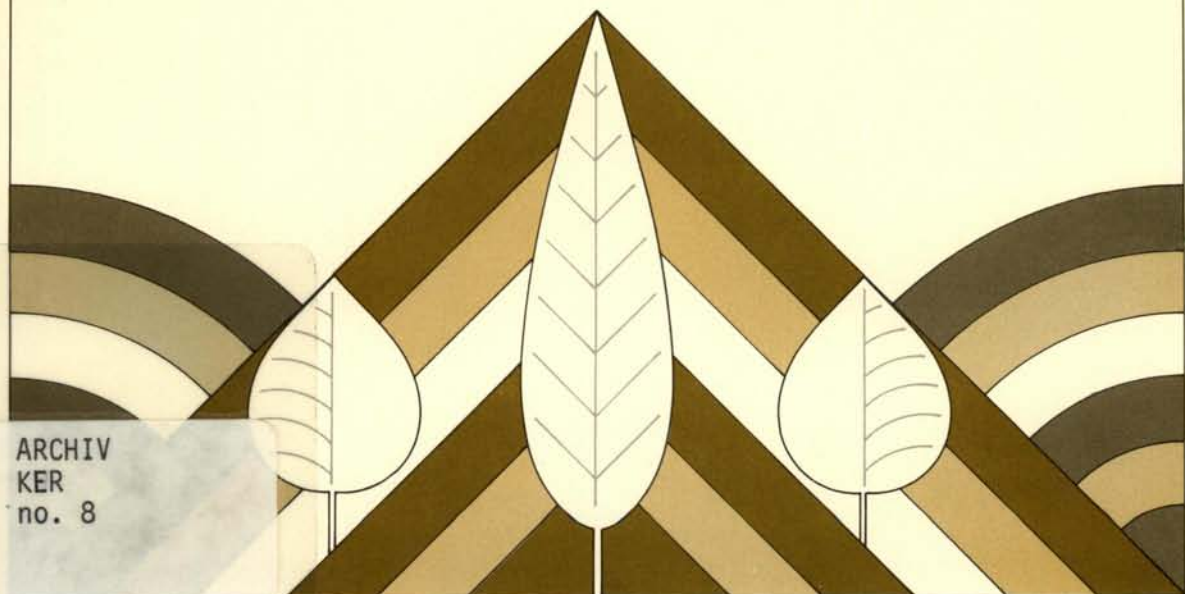
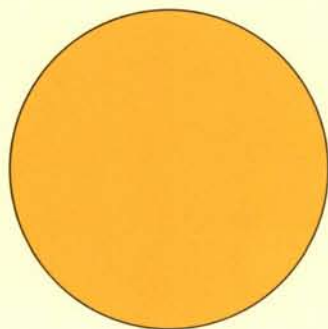
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INTERCROPPING in semi-arid areas

Report of a symposium held at the
Faculty of Agriculture, Forestry
and Veterinary Science,
University of Dar es Salaam,
Morogoro, Tanzania,
10-12 May 1976

Editors:
J.H. Monyo, A.D.R. Ker,
and Marilyn Campbell

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Farmer's field near Ibadan, Nigeria, showing intercrop of cowpea under maize

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Intercropping as a Means of Producing Off-Season Tomatoes during the Hot Summer Months in the Sudan

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The tomato is an important vegetable crop that is used daily by almost every family in big cities in the Sudan as a salad crop or in the local stews. Commercial production is limited to the winter months (October–March) because during the hot summer months (April–July) the tomato fails to set fruit. Research had indicated that the hot dry winds and the low relative humidity are the major factors contributing to this phenomenon

of fruit-set failure.

Many crop husbandry practices were introduced to overcome this problem. However, in the "Alafoun area" near Khartoum intercropping tomato with pigeon pea modified the environmental conditions and enabled the production of tomatoes during the hot summer months, thus saving hard currency that used to be spent in importing tomatoes during that period.

Development of Cowpea Ideotypes for Farming Systems in Western Nigeria

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Western Nigeria has three main types of vegetation, namely savannah to the north, mangrove swamps to the extreme south, and rain forest and deciduous forest between them. Except in the mangrove swamps, farming is done mainly by peasants with characteristic small holdings, shifting cultivation, and mixed cropping. Larger size farms under sole cropping are managed by literate farmers and government agencies. All farms are rainfed.

The cowpea crop is grown mostly in the second season beginning in September. During this season, rainfall and daylength are diminishing. Traditional varieties are mostly prostrate, indeterminate, and appear to be suited to competition in mixed cropping systems. For the larger farms adopting monoculture, a

more erect and uniform-maturing type plant suitable for mechanical harvesting is more useful.

Attempts have been made to develop high-yielding, uniform-maturing cowpea varieties for the farming systems highlighted above. Such plant types have yet to be tested under mixed farming as practiced by farmers. For monoculture, the upright habit with fewer branches has been found suitable. The question of optimum yield level of the crop is unresolved. Progress in this area in terms of physiology, leaf display, partition of dry matter, etc., are still in the rudimentary stage. The best breeding methods to obtain yield have not been found. Only the traditional breeding methods have been adopted as yet, though some good results have been obtained.