

ABSTRACT

Two experiments to examine different systems of intercropping high-lysine white translucent corn and U.W.I. GI 27/4A dwarf pigeon pea were conducted between July 1972 and July 1973 at the Texaco Food Crops Demonstration Farm, Valsayn.

Data on seed yield, yield components, plant heights, dry matter per plant and seed protein contents of both crops and girth size of pigeon pea were recorded during the trials. Yields of dry matter, protein and the gross returns (for the different systems of intercropping) were computed.

In both experiments dry matter, seed and protein yields and gross returns per hectare of mixed stands were never lower than that of the low yielding pure stand and in Experiment 2 were more or equal to that of the high yielding pure stand.

The effect of the corn shading on pigeon pea (height and girth size), the possible symbiotic nitrogen contribution of pigeon pea to the mixed association, the current market prices of the crops produced and the variation in plant populations employed in the two experiments probably have caused the varied results observed.

The lack of net economic returns data limits the stating of definite conclusions on the economic advantages of the different intercropping systems.