

## Evaluation of sowing opportunities for Lombok and Flores - Indonesia

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The previous paper (1) emphasises the effects of sowing date on rain grown cotton yields in the Indonesian islands of Lombok and Flores. Food crops (mainly maize) are given first priority when the 'dry' season breaks. With a short 3 to 4 month 'wet' season, sowing opportunities for alternative crops and intercrops need to be evaluated. This paper presents results for three sites and a range of sowing criteria.

### Methods

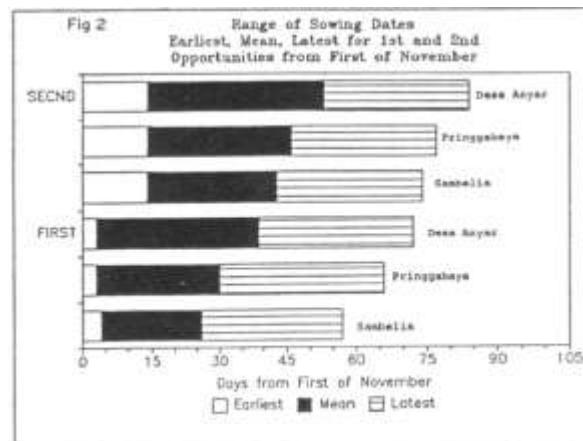
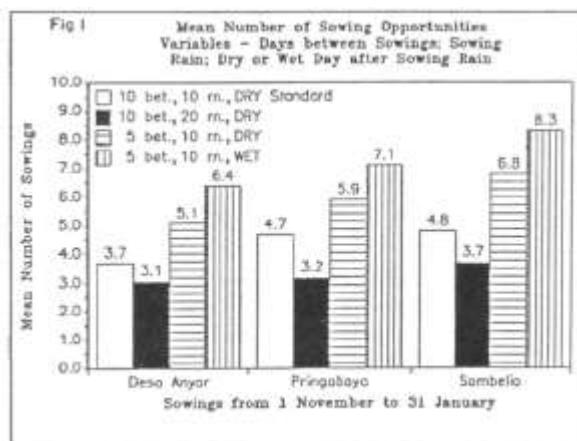
The standard sowing criterion adopted was 10 mm of rain over 3 days followed by a dry day with less than 5 mm rain to allow sowing to proceed. Rain < 5 mm was discounted in the 3 day cumulative total. A minimum of 10 days between consecutive sowings was specified. COTWBAL (1) was run with various combinations of the variables - days between sowings, amount of sowing rain and dry or wet day following sowing rain.

### Results and discussion

For the three Lombok sites shown, the mean number of sowings from 1 November to 31 January was 3.7 to 4.8 for the standard sowing criteria (Fig. 1). This decreased to 3.1 to 3.7 if sowing rain was increased to 20 mm and increased to 6.4 to 8.3 if the sowing interval was reduced to 5 days and if the proviso of a dry day was removed. Rain in the form of afternoon storms should not prevent the start of sowing. More local information is required on optimum and limiting conditions for crop establishment but there are adequate sowing opportunities for both food and cash crops provided sowing commences as soon as possible after the start of the 'wet' season.

In Fig. 2, the earliest, mean and latest sowing dates (standard sowing criterion) for the first and second sowing opportunities after the first of November are shown.

Fig. 2 is based on 16 years rain data and highlights the variability both within and between sites in start of sowing



1. Keefer, G.D., Ladewig, J., Diarini, P. (1989). Proc. 5th Aust. Agron. Conf., Perth.