## Sub clover for Tasmania: flowering times of registered cultivars

P.M. Evans and J.A. Carpenter

Dept of Agriculture, Mt Pleasant Laboratories, Launceston Sth, Tasmania

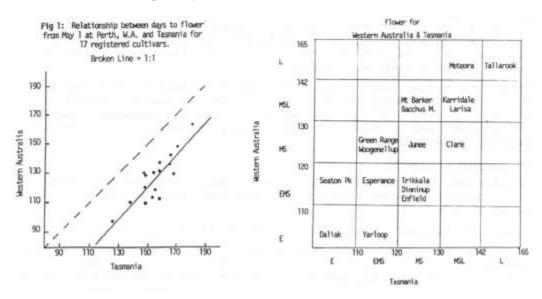
Flowering times of cultivars of sub clover (Trifolium subterraneum) are controlled by both temperature and photopericd (1,2). As a result, genotype by environment interactions in flowering times in sub clover have been reported many times, (3 4, 5). It is important, therefore, to record days to flower in every environment.

## **Methods**

The progress of flowering was recorded at 3-4 day intervals in pasture plots sown in May at 3 sites described in (6). "Days to flower" was defined as the number of days between sowing and the time when 50% of plants had one inflorescence.

## **Results and Discussion**

Flowerin<sub>2</sub>g times for Perth, Western Australia, (7) and Tasmania are shown on Fig. 1. Since r is 0.72, and the slope of the fitted line and the 1:1 line are very similar, Table 1 was constructed by subtracting 29 days for every flowering time in Tasmania. This table shows that the order of flowering of Trikkala and Enfield in relation to Woogenellup is reversed when sown in Tasmania.



These data show the value of conducting some stages of sub clover breeding and evaluation *ploy* rams in the districts the crossbreds and introductions are intended for. In cool environments, the interval between sowing and flowering is shortened by later sowings (8). This is observed in Tasmania. If times to flower were taken from late winter-early spring (e.g. 1 September), they would be more accurate, since sowing dates would not matter provided they occur before winter.

- 1. Aiken, Y. 1955 Aust. J. Agric. Res. 6:212-244 Evans, L.T. 1959 Aust. J. Agric. Res. 10:1-16
- 2. Aitken, Y. and Drake, F. 1941 Proc. of the Roy. Soc. of Vic. 53:245
- 3. Morley, F.H.W. and Davern, C.I. 1956 Aust. J. Agric. Res. 7: 388-400

- 4. Devitt, A.C. Quinlivan, B.J. and Francis, C.M. 1978 Aust. J. Exptl. Agric. Anin. Husb. 18:75-80
- 5. Evans, P.M., Carpenter, J.A. 1987 Proc. 4th Aust. Agr. Conf.
- 6. W.A.D.A. Bulletin 4083
- 7. Dear, B.S., Loveland, B. 1984 Aust. J. Expt. Agric. An. Husb. 24:543-549