Early season aphid activity

The temperature during January and February is critical to aphid activity in the forthcoming growing season. The mean temperatures during this period at both SASA (Edinburgh) and SCRI (Dundee) were about 1.3°C warmer than the 35-year mean. The warmer 2005 winter indicates that the first flights of aphids will be between two and three weeks earlier than in an average year (see Table 1) and the total aphids caught before 1 August will be above average.

Table 1

East Craigs	2005 Prediction	75% Confidence Limits	2004 Observation
Myzus persicae	25 May	3 May to 16 July	9 May
Macrosiphum euphorbiae	10 May	19 April to 30 May	28 April
Dundee	2005 Prediction	75% Confidence Limits	2004 Observation
Myzus persicae	1 June	6 May to 27 June	24 May
Macrosiphum euphorbiae	19 May	22 April to 15 June	1 May

The 75% confidence limits quoted in Table 1 provide an estimate of the expected accuracy of the 2005 prediction, i.e. 3 times out of 4 the prediction should fall within these limits. The average date of first capture for the Peach-Potato aphid (*Myzus persicae*) over the last 36 years is 14 June at Edinburgh (17 June at Dundee). The mean date for catching the first Potato aphid (*Macrosiphum euphorbiae*) at Edinburgh is 22 May (1 June at Dundee).

Total catches of potato aphids are likely to be slightly higher than usual. The model prediction is that 37 *M. persicae* will be caught at Edinburgh before 1 August (75% confidence interval of 10 to 137 aphids). At Dundee, the predicted catch over the same period is 35 *M. persicae* (75% confidence interval of 8 to 141). If these predictions are borne out then 2005 will rank 12th out of the last 37 years in terms of the abundance of *M. persicae*.