

# A NOTE ON RELATIVE INCIDENCE OF RHOPALOSIPHUM PADI (L.) ON DIFFERENT VARIETIES OF RYEGRASS

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Pots of each of the following varieties of ryegrass were grown in trays, one variety per tray, several trays of each variety: Perennial (Grasslands Ruanui), Long Rotation (Grasslands Ariki), Short Rotation (Grasslands Manawa), and Italian (Grasslands Paroa). Cocksfoot was also included in the test which was carried out in a temperature-controlled glasshouse. They were evenly infested with the cereal aphid, *Rhopalosiphum padi* (L.). After ten days, when the aphids had settled down, counts from ten tillers of each variety showed no statistical difference at this stage (overall mean of 18 aphids/tiller). The plants were then completely randomised so that trays contained all varieties. These plants, all of similar size, were spaced so that all plants were touching and the aphids were free to move from one plant to another.

After seventeen days counts were taken from six plants of each variety, three tillers per plant.

	Mean No. of Aphids/Tiller	Av. % Tiller Loss (After Kelsey 1960)
Perennial Ryegrass .....	73.4	31%
Long Rotation Ryegrass .....	111.9	18%
Short Rotation Ryegrass .....	116.2	71%
Italian Ryegrass .....	176.4	92%
Cocksfoot .....	82.4	—

These figures show a similar trend between varieties, to the work done by Kelsey 1960, on the preference of *Hyperodes bonariensis* (Kuschel) for the different varieties of ryegrass. Although these two insects feed by totally different methods, it is possible that the factors which predispose the ryegrass varieties to attack are the same for both insects.

## REFERENCE

KELSEY, J. M., 1960: Argentine Stem Weevil. Annual Review Mid-Canterbury Executive Federated Farmers 1960: 44.