



Hessian GeoHess covered plot



Agralan Enviromesh covered plot showing the fly proof cage with a Victor fly trap suspended from the centre.

1.1. Statistical Analysis

Data from the manual recording sheets were transferred at ADAS Arthur Rickwood to a Local Area Network, using a Minitab spreadsheet. Results were analysed using a Genstat Ranblock analysis of variance. Where there was a significant difference ($P \leq 0.05$), the means were separated using Duncan's multiple range test at the 5% probability level, but the overall probability of detecting a treatment difference is much higher than 5%, and apparent treatment differences may or may not be real. In some cases, the data were transformed prior to analysis to allow statistical comparisons to be made.

Where data values were low, it was recommended by the ADAS statistician, that the data should be analysed by means of the Friedman's test. This is a nonparametric analysis that may be performed on a randomised block design and is especially useful with data that do not meet the parametric analysis of variance assumptions of normality and homoscedasticity.

Because of the necessity to set out the 'No cover material/exposed refuse' plots differently from the others, they could not be included in the statistical analysis.

1.2. Materials / Equipment

- a) Hessian, Geo Hess covers stitched and supplied by Geo Hess
- b) Polypropylene Agralan Enviromesh covers.
- c) Inert clay cover supplied by Shanks & McEwan as used routinely on site at a depth of 150mm.

Flyproof cages, 1m³, were made up of a wooden frame with central struts covered on five sides with a fly proof net curtain material secured by means of tape and staples. Access to the traps was obtained through an opening along the top strut which was secured by velcro. A pelmet of net was arranged around the base of each cage which was in turn secured to the ground by means of either brick dust in trial 1 and bricks in trial 2.

d) Scudder grid consisting of a wooden grid 60cm x 60cm. (WHO tool for measuring flies in landfill, method described in Appendix 2)

e) Putrescent fly traps (Victor) obtained from Animal Aids Ltd. containing a mixture of dextrose, egg powder and dried yeast.

f) Rat traps with non-poisonous bait supplied by T.C.A. Fricker.

g) Meteorological equipment consisting of a Delta T data logger with two temperature probes recording daily maximum and minimum temperatures at ground level and 1m depths, an electronic rain gauge, a RH sensor at 1.2m height and an anemometer at 2m height. Meteorological data for the period of the trials, was also obtained from the nearest station sited at Grendon Underwood 2.5miles from Calvert.

h) The sprayer was supplied and calibrated by Steve Wheeler contracted by GeoHess. It consisted of a quad-bike system - Heyson OB22001 with a 1.5m boom fitted with Hardi nozzles 2080-50. The insecticides were applied at a pressure of 40psi (2.8bar).

