Section II Foliage and Seed-feeding and Mining Insects

EVALUATION OF COLORED STICKY-TRAPS FOR MONITORING CABBAGE SEEDPOD WEEVILS J. P. McCaffrey Department of Plant, Soil and Entomological Sciences University of Idaho, Moscow, ID 83843

The emphasis of this past year's work dealt with the evaluation of monitoring systems for the cabbage seedpod weevil, Ceutorhynchus assimilis, in winter rapeseed. Colored sticky-traps have been used since 1977 to monitor weevil flights into fields. John Deere Yellow has been the standard color used to date. This choice of color was based on the knowledge that the weevils are attracted to the rape fields by the yellow flowers. This was a good intuitive choice, but the effect of trap color on weevil catches has never been evaluated. With this in mind, different colored sticky-traps were evaluated as to their relative attractiveness in order to identify which color should be used for a visual sticky-trap monitoring procedure. Nine colors were evaluated, including three different yellows, green, orange, red, blue, black, and white. Each trap consisted of five #10 cans mounted on a wooden post at about 33 cm intervals starting at 30 cm from the ground. All cans on a post were painted the same color (as was the post). Each post represented one trap and a trap-line including each of the nine colors was placed in each of three fields. Individual color traps were separated from one another by 20 m. Each trap-line was set in a north-south orientation to avoid problems with prevailing westerly winds. All traps were monitored weekly.

The response of the weevils to all yellows was high relative to all other colors. Orange was somewhat less attractive than yellow, but more attractive than the other non-yellow colors. While yellows were the most attractive to the weevils, weekly catches for the non-yellow traps were highly correlated to the yellow trap catches. Correlations ranged from 0.92 - 0.99, indicating that while the non-yellow traps were less attractive, they showed the same seasonal trends in terms of weevil catches.

What this study indicates is that the yellow traps (John Deere Yellow) which have been used since 1977 are appropriate; however, other colors, including non-yellows, may be acceptable.