

INCREASING THE EFFICIENCY OF FLY CONTROL METHODS THROUGH THE USE OF ATTRACTANTS

GÜNTHER NENTWIG*, BERND WIELAND KRÜGER**, JÜRGEN LENZ**

*Animal Health Research/Hygiene, Bayer AG, D-5090 Leverkusen 1, Germany

** Central Chemical Research, Bayer AG, D-5090 Leverkusen 1, Germany

Substances which attract flies (*Musca domestica*, Diptera: Muscidae) to the site of control can help to significantly improve results in fly control actions.

Our investigations with numerous attractants, formulated in insecticide baits show that certain synthesised natural compounds have a high attractiveness to *Musca domestica*.

One of these, which is composed of a defined combination of organic acids and other chemicals was found to be especially active. This is referred to here as LEJ 179.

Baits containing LEJ 179 were 4 times more attractive than baits without the additional attractant in direct comparison tests. The addition of (Z)-9-Tricosene further increased the attractiveness. The better efficacy of baits containing LEJ 179 was confirmed in numerous semi-practical tests.

In the semi-practical tests with a paint-on insecticidal bait formulation, the bait containing LEJ 179 was twice as effective as the same product without LEJ 179. Practical tests on farms confirmed this improvement in efficacy.

Fly tapes in which LEJ 179 was incorporated into the glue were 4 times more effective in laboratory tests than those without the attractant. This improvement in fly catching ability was confirmed in semi-practical tests.

It is concluded that addition of LEJ 179 improves the attractiveness of fly control products. Additional formulation work should further improve the attractiveness. The addition of LEJ 179 in other applications is currently being investigated.