

IMPORTANCE of BAIT ALLOCATION on the SUCCESS of RAT CONTROL on LIVESTOCK FARMS

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Rats on farms live in a stable environment that provides plenty of shelter and high-value food alternatives. Therefore rat control often fails, resulting in long-term infestations that are more difficult to control the longer they resist control attempts, resulting in the demand for professional strategies. We investigated how control success is determined by the allocation of rodenticide baits on farms and elaborated a standardised practice for successful rat control. The baits used were Racumin® Paste (375ppm coumatetralyl) and Rodilon® Pellets (25ppm difethialone). Both products were evaluated in 4-day choice trials vs. broken wheat (EPPO standard) using wild, laboratory-reared Norway rats. Racumin Paste performed with relative attractivity of 0.50 and 100% mortality, and Rodilon Pellets with 0.29 and 93%, respectively. A rat-control campaign was conducted using both products on 50 farms in the Muensterland area, N-W Germany. 70% of farms using Racumin achieved complete eradication, and 64% with Rodilon, respectively. Seven types of structural elements were identified, such as piles and feed silos, that must be furnished with bait stations. Complete rat eradication was achieved on all farms, where a total of 80% or more of sites belonging to one of these elements were baited. Infestations could not be eradicated on farms where less than 80% of the identified sites were baited. Palatability of the bait seems to be a more important precondition for control success than the active ingredient. The results of the campaign were transformed into an interactive program, BayTool®, which enables the farmer to create a rat-control plan tailored for his farm.