

1976. Proc. 7th Nat. Pest Cont. Council Conf. 7: 95-97

The National Rat Control Program

By

*

Jesus P. Sumangil

A number of observations have important bearing on the creation of certain guidelines for the national rat control program now in operation. First, it is found that excessive crop losses in rice need not necessarily be directly associated to wastelands since mere introduction of farming innovations, as in multiple cropping through systems of irrigation, may actually trigger equally successful if not faster development of rodent problems. Secondly, it is found that there is no direct ratio between field losses in rice to rodent numbers over a given time period and that, thirdly, there is no significant difference in crop losses obtained between Masagana 99 supervised and non-program rainfed plantations in major rice production areas of the country. The fourth, and probably a more compelling observation, is the assessment that about 90 percent of all paddies examined before harvest contain "measurable damage" as a result of rat depredation.

We note, therefore, that the loss of 4.34 percent attributed to rats in FY 1975-76, estimated to value some ₱ 350, 000, 000, would be more than sufficient ground to look into the operations of the national program over an impact area estimated to range between 600, 000 to 800, 000 hectares, about one-half of which is within the Masagana 99 rice production area. I would like to outline and discuss with you the various components and mechanisms of the national program, including practical rodent control aspects relevant to Philippine agriculture.

Two decades of research and experience provide a valid approach in changing our objective of rodent control from one which focuses attention on the number of rats killed, and thus sets extinction as a goal, to another which simply aims to reduce damage below intolerable levels through proper management of rat populations based on available economic and technical resources. Understandably, partial control merely creates more room for survivors to be better sheltered and fed and this more often results in prompt population rebound as an offshoot of stimulated reproduction.

* Chief, Section on Rodents and Other Vertebrate Pests, Bureau of Plant Industry, Manila and Deputy Director, Rodent Research Center, College Laguna.

The effective removal of large and widespread field rat populations and long-term maintenance of residue animals at a level below that causing intolerable field losses must as well be attained by employing reductional systems at a cost much less than the damage they are to relieve. No single rat control method is known to equal the results obtained as when various reductional procedures, such as lethal baiting, physical extermination, natural predation, habitat manipulation and proper cultural practices, are utilized in support of the other.

The choice and adoption of sustained anticoagulant baiting as the principal tool onto which the national rat control program is anchored reflect on the success of Philippine technology, through the laboratories of the Rodent Research Center and the Philippine-German Crop Protection Program, in bringing about easier and less costly utilization of chronic rodenticides well within the reach of farmer-users. Conversely, the program recommends total banning of sodium fluoroacetate (Compound 1080) and fluoroacetamide (1081) from further usage in local rat control activities in view of the severe environmental backlash both had created in our ecosystems. It recommends however the selective and non-repetitive employment of zinc phosphide where the need to reduce widespread rat eruptions arises.

National priorities and funding limitations have created two operational but interlinked areas of activity within the program - the Masagana 99 and non-program rice production areas - where the Bureau of Plant Industry (BPI), the national crop protection implementing agency, oversees the whole operation including data monitoring, control evaluation and programming of municipal, provincial and regional activities. The Rodent Research Center and the Philippine-German Crop Protection Program handles the role as technical support agencies, among which personnel development through training is a major function.

Two major innovations are programmed as part of the Masagana 99 area of activity. A P 50 loan per farmer per hectare per season for the purchase of needed rodenticides, bait and baiting materials is part of the packaged scheme to secure his needs to establish proper rat control. Similarly, all production technicians from various agencies (Bureau of Plant Industry, Bureau of Agricultural Extension and Department of Agrarian Reform) involved in the Masagana 99 program are committed to undertake active management of rat control activities in their respective areas of operation. These innovations have revolutionized rodent control in the most modern aspects of activity.

The Bureau of Plant Industry has, in its coverage of non-program rice areas, completely ceased extending material doles in the form of rodenticide to the farming sector. Doleouts have been identified to have much less result in bringing about effective rat control in recipient areas. Lack of visibility in results has largely been associated to misuse and mishandling of relief compounds. Appropriate studies are under way looking into possible sources of funding to secure similar loans for non-Masagana 99 farmers involved in rodent control. Meanwhile, the application of R. A. 3942 (Rat Act) is in force in these areas concentrating generally on community-wide physical extermination and selective poisoning campaigns.

The role of the regional, provincial and municipal development councils in bringing about close rapport in community rat control through the barangay level remains to be the key to the current concept of national rat control. With but slight modifications this has been the framework of organized Philippine rat control in the past.