Research Paper

Field evaluation of new cake formulations of flocoumafen and difenacoum against lesser bandicoot rat, *Bandicota bengalensis* (Gray) in rice

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Abstract : Technology of poison baiting by using rodenticides is the most popular and preferred choice of rodent control in field crops as well as orchard crops. The lesser bandicoot rat, *Bandicota bengalensis* (Gray) is the most important rodent species infesting rice and other field crops. In order to contain the rat population, second generation anticoagulants, flocoumafen and difenacoum in the form of Cake formulations were evaluated against *B. bengalensis* in rice crop. Both the rodenticides including bromadiolone has recorded significant percent reduction of lesser bandicoot rat @0.005% concentration after every pulse. Overall efficacy after analyzing pooled data of two pulses in the season, Flocoumafen 0.005% Mini bait block @ 8 g bait blocks /burrow achieved 79.49 per cent CS on LBC/ha basis and 83.51 per cent CS on tiller basis followed by 70.19 per cent on LBC/ha basis and 68.45 per cent on tiller basis in case of Difenacoum 0.005% Mini bait block @ 8g /burrow which is significantly superior over Bromadiolone. Flocoumafen rodenticide found highly effective and significantly superior in containing the live burrow counts and tiller damage caused by *B. bengalensis* in rice.

Key Words: Flocoumafen, Difenacoum, Bromadiolone, Bandicota bengalensis, Rice

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INTRODUCTION

Rodents create a great nuisance by causing extensive damage to field crops and structural damage in residential premises, besides transmitting several dreaded zoonotic diseases among humans and their animals. In India, among the pest rodent species, The lesser bandicoot rat, *Bandicota bengalensis* (Gray) is a predominant and more challenging in rice. These rodents often inflict 10-15% tiller damage in rice at various crop stages including Primordial Initiation which accounts to a yield loss of 10% grains in rice growing areas, especially in Godavari delta of Andhra Pradesh (Srinivasa Rao and Nanda Kishore (2009). Even though

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