PHEROMONE IN RABBITS: PRELIMINARY TECHNICAL RESULTS ON FARM USE IN FRANCE

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ABSTRACT

The results obtained when a pheromone, the Rabbit Appeasing Pheromone (RAP), was applied on farms between July 2005 and February 2007 are shown and discussed. The authors present briefly the pheromones and refer to the following definition: a pheromone is a chemical substance produced by one animal to communicate by olfactory route with other congeners of the same specie, and to induce on them some innate stereotyped behaviour patterns. The same protocol of RAP application was implemented in 9 farms differing for size, location, reason of RAP use and season when the product was applied. All the farms were under all in-all out system of management. RAP devices were introduced in the reproduction compartment 2 to 3 days before parturition, and let for 42 days until the next parturition. So, the litters grew under action of the product until weaning (35 days). As the pheromones spread in the air, it was not possible under field conditions to have contemporary placebo treated control, thus, technical results obtained with RAP were compared to the results of the previous cycles. Only farms with regular technical monitoring and properly recorded data were included in this trial. The data were transmitted by the technician responsible for the farmer economical results. In most of the cases, the farmer observed that the animals seemed quiet quickly after the implementation of the product (from a few hours to 1 day). Does were less stressed, and technical actions (as sweeping, nest manipulation, introduction of external personal) were easier. At least, technicians often noticed by additional comments on the technical documents that the treated rabbits were heavier and healthier at weaning. Fertility (percentage of parturitions per artificial insemination (AI), live born kits per litter and kits viability at birth improved in 3 farms. A global analysis, performed from data of all the farms (13090 does of reference groups and 8915 of treated groups) confirmed this trend. The results of this pooling were quite comparable to individual data recorded in each farm, confirming the interest of the use of this RAP for reproductive does. In conclusion, these trials brought new information regarding the use of pheromones on a mammal species: does are quieter with RAP, and manipulations are easier, fertility, litter size and viability at birth improve.

Key words: Rabbit appeasing pheromone, Rabbit doe, Fertility, Litter size, Litter mortality.

INTRODUCTION

Field trials were conducted in farms located in different regions of France from July 2005 to February 2007 with a new product, based on a combination of several rabbit pheromones (Rabbit Appeasing Pheromone – RAP - Lapézil® - Ceva Santé Animale, Libourne, France). The objective of this article is to present an overview of first behavioural and productive results obtained.

MATERIALS AND METHODS

Product and administration

Definition of pheromones is debatable, and this term often gives rise to many questions. To simplify and avoid any focus on formal points, we will adopt for this present text the following definition: a