INTRODUCTION

On behalf of the Dutch interest group for biological farming (Biologica) a research project was initiated with the goal to increase the availability of herbal food additives of proven quality and efficacy [1]. This project involved poultry, dairy cows, and pigs, but the results of the latter animals are presented here, only.

RESULTS AND DISCUSSION

Herbal products showed positive effects on growth and/or feed conversion of weaners mainly as a trend (p<0.12) that were matched with data of earlier research found in literature (table 2,3,4). No negative side effects were seen. Slaughter data were promising but not always consistent. To demonstrate health improvement, molecular parameters such as the amount of detoxifying enzymes (CYP450) can be measured. Tests with larger groups of animals are necessary to confirm the reported trends and to obtain significant treatment-effects. Implementation in farm management, optimal dosage-levels, as well as the regulatory aspects of these herbal additives need further consideration.

METHODS

An inventory identified over 70 herbal preparations available for pig health (table 1). On basis of the available data, three products were selected for further clinical experiments. Two products contained (mainly) essential oil of oregano, the third was a mixture of approximately 10 plant extracts. For each product approximately 64 organics pigs were fed herbal additives from weaning until slaughter; growers in four pens; fatteners in three pens. Control groups of the same size and housing received feed without these herbs. Study-parameters were growth, feed conversion, mortality, requirement of additional veterinary treatment, meat percentage, back-fat, carcass- and organ-findings. Liver biopsies were evaluated for parameters relating to pig health.

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References

1. More details on the website of the project www.fyto-v.nl

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Table 1. Results of literature and market search

Table 2. Claims and test results clinical trials A (control) vs B (Biomix P.E.P.: ess. oil mix)

Table 3. Claims and test results clinical trials A (control) vs C (Ropadiar: oregano oil)

Table 4. Claims and test results clinical trials A (control) vs D (Digestamec: herb mix)

Approach: www.ethnobotany.nl