EFFECTIVENESS OF TEAT COVERAGE WITH POST MILKING TEAT DISINFECTANT USING A VACUUM OPERATED TEAT SPRAY SYSTEM

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INTRODUCTION

Complete teat coverage with the post milking teat disinfectant is essential in any mastitis control programme. Besides the bacteriocidal action on the teat surface and orifice, it is essential that all teat skin is kept as soft and as supple as possible to withstand the rigours of milking. There are an ever increasing number of automatic teat spraying systems available to dairy farmers, and ideally any such system will provide 100% teat barrel and teat end coverage, 100% of the time. But is this realistic? What is the coverage with manual teat spraying for comparative purposes?

The objective of this study was to measure post milking teat barrel and teat end coverage when manual spraying with disinfectant.

EVALUATION METHOD

Teat barrel and teat end coverage were assessed post application of the teat disinfectant product on ten farms, each with a minimum of 150 cows.

To assess barrel coverage, the front and back of the teat was scored as a maximum of 50, i.e. if all one teat side was completely covered this equated to 50 (100% coverage of that plane), whereas a score of 25 meant that only half of that plane was covered in chemical. If both sides of the teat barrel were completely covered this equates to 100% teat barrel coverage.

Teat end coverage was assessed as either covered or not covered (hit or a miss).

The volume of teat disinfectant product applied during the monitored milking was measured and a calculation of chemical usage / cow / milking was made.

RESULTS

Table 1. Teat end and teat barrel coverage with disinfectant

Table 2. Percentage teat end coverage

Table 3. Teat barrel coverage

CONCLUSION

There is a significant range in the skill with which post milking teat disinfectants are applied with a hand held, vacuum operated teat sprayer. This level of variation is worrying, and on many farms the objectives of teat spraying are not being achieved. An automatic system that applies the product consistently and achieves acceptable levels of teat barrel and teat end coverage would be advantageous to the industry.

The Evaluation Method is a simple and effective means of accurately measuring the level of teat barrel and teat end coverage with pre-milking and post milking teat disinfectant, whether by manual dipping or spraying or by an automatic system.