



D. Juan Luis Úbeda Echarte
Technical Manager
Magapor S.L.

THE VETERINARY TECHNICAL DEPT. EXPLAINS: CONTROL OF BACTERIAL CONTAMINATION

Bacterial contamination of boar semen usually occurs during the collection and in vitro processing operations of the ejaculates¹. The **consequences** resulting from this contamination are many: poor preservation of semen, agglutination, excessive damage of the acrosome, low motility and death of sperm².

At a reproductive level, a correlation has been proven between bacterial contamination and a **reduction in the number of piglets**³, as well as diseases in the sow, such as cystitis, pyelonephritis, endometritis or brucellosis.

Bacteria survive well in conventional semen extenders unless antibiotics are added. Amino-glycosides such as Gentamicin and Lincosamides are the most widely used antimicrobials in boar semen extenders^{4,5}. However, certain bacteria have developed resistance to these antibiotics⁴.

Several studies have shown different prevalences of infection of the seminal dose of 31.2 %, 17% and 26%⁴.

Magapor's own experience in boar semen tests has revealed a prevalence of 26.4 % contaminated doses and isolation of more than 19 different types of bacteria.

Magapor's concern over this issue led us to develop a collection extender and hygienization of ejaculates capable of ensuring an efficient, rational and targeted use of antibiotics, DICOL.

¹Thaker et al., 1984; Althouse et al., 1998; Tamuli et al., 1984.

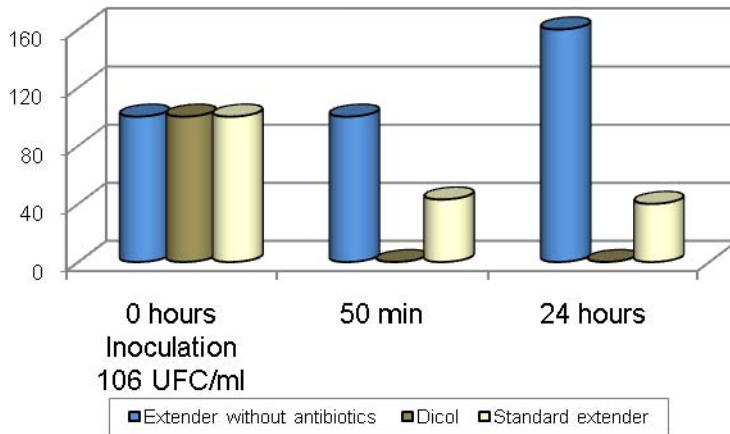
²Althouse et al., 2000.

³Maroto Martín LO et al., 2010. ,

⁴Althouse et al., 2005.

⁵Mazurova et al., 1991.

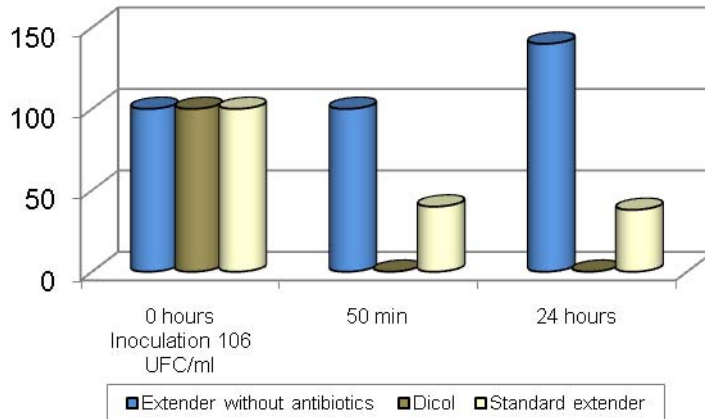
Serratia Marcescens



The following charts show the evolution of contamination in cfu over time with use and nonuse of DICOL, starting from semen doses infected with multiresistant strains..

Micrococcus sp

Bacterial charge UFC/ml (x 10000)



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