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Presence of *mecA* in *Staphylococcus* spp. isolated from bovine intramammary infections

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Resistance to oxacillin (methicillin) is reported frequently in human strains of *Staphylococcus* spp. but recently, it has also been described in isolates of various animal species. The oxacillin resistance in *Staphylococcus* spp. is mainly caused by the production of PBP-2a protein, encoded by *mecA*, which confers resistance to all beta-lactam antibiotics, including cephalosporins and carbapenems. This study aimed to verify the presence of *mecA* gene in 182 strains of *Staphylococcus* spp. resistant to oxacillin by the agar diffusion method. The strains were isolated from bovine milk collected at five Brazilian states: Minas Gerais (04), Paraná (27), São Paulo (80), Santa Catarina (60) and Rio Grande do Sul (11). The presence of *mecA* was determined by amplification of a 533 bp product by polymerase chain reaction (PCR). The results showed that 11 strains (6%) presented the *mecA* amplification product: two strains isolated in Minas Gerais, five isolated in Paraná and four isolated in Santa Catarina. Ten out of the 11 positive strains were identified as coagulase-negative *Staphylococcus* and one as *S. aureus*. To double check the presence of the *mecA* gene, PCR products were sequenced on an automatic sequencer and compared with *mecA* gene sequences deposited in the NCBI database. The sequenced fragments aligned along its entire length (100%) with the sequence of the *mecA* gene. These preliminaries results emphasize the need to monitor antimicrobial resistance profiles in veterinary practice and the presence of *mecA* gene in oxacillin-resistant strains. Financial Support: Embrapa, CNPQ, CAPES and FAPEMIG.

SP 5973
P 194