

Letter to the editor
**MYCOPLASMA DETECTION IN SWINE SAMPLES BY A MOLLICUTES
SPECIFIC PCR**

Dear editor:

Mycoplasmas most commonly found in swine are *Mycoplasma hyopneumoniae*, *M. hyorhinis*, *M. hyosinoviae*, *M. flocculare* and *Eperythrozoon suis*. *Ureaplasma* sp. has been also isolated from semen. *Mycoplasma hyopneumoniae* is the most important one, as this is the causative agent of Enzootic Pneumonia in swine. This disease causes significant economical losses worldwide. *M. hyorhinis* and *M. hyosinoviae* have been found basically in arthritis cases, while *M. flocculare* is considered as a common inhabitant and not essentially pathogen.

Although culture technique is the gold-standard for microorganisms of Mollicutes class diagnosis, specially of *Mycoplasma* genera, it is laborious and time-consuming. That is why PCR has become a useful tool for Mollicutes detection in different types of samples. A Mollicutes specific PCR taken from literature has been optimized and successfully used in our laboratory for mycoplasma detection in cell culture, serum and biopharmaceutical products.

In order to determine the feasibility of this assay for Mollicutes detection in swine samples, a total of 65 samples, which included lungs with typical lesions of enzootic pneumonia, nasal exudates, vaginal exudates and semen were analyzed. A number of 32 (49 %) samples were positive to Mollicutes infection, suggesting that species of *Mycoplasma* or *Ureaplasma* genera could be present, according to literature. These results prove the feasibility of the Mollicutes specific PCR used in our laboratory for Mollicutes detection in clinical samples, as a first step for further identification of the main species involved in pathological processes in swine. This is very important specially for *Mycoplasma hyopneumoniae* rapid detection during an enzootic pneumonia process, since culture technique, in this case, can take even up to two months.

Yaima Burgher, Evelyn Lobo

Microbiology Department. Biology Group. Laboratory for Mycoplasma Diagnosis, Mycolab