

## ARTÍCULO CIENTÍFICO

# APLICACIÓN DEL DIAGNÓSTICO MEDIANTE LA REACCIÓN EN CADENA DE LA POLIMERASA DENTRO DEL PROGRAMA DE ERRADICACIÓN DE FIEBRE AFTOSA EN ECUADOR

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## APPLICATION OF DIAGNOSIS BY POLYMERASE CHAIN REACTION WITHIN THE PROGRAM OF ERADICATION OF FOOT AND MOUTH DISEASE IN ECUADOR

### Abstract

Foot and Mouth Disease (FMD) is a highly contagious disease, historically it had caused considerable losses in global livestock production. The PCR technique has been applied in the Laboratory as an important tool in the monitoring process within the program to eradicate FMD conducted by AGROCALIDAD. The sensitivity and reproducibility was assessed for different sets of primers for the identification of infected animals and O serotype. Obtaining a high sensitivity of 1 pg and a 100% of reproducibility for both primer sets. The standardized methodology was applied for screening FMDV RNA in 44 samples of bovine epithelium of different provinces and oesophageal-pharyngeal fluids negative of virus isolation, all sample samples with negative results. These samples came from different provinces within the surveillance activities supported by the National Project for Eradication of FMD.

**Keywords:** ARN, Ecuador, Foot and Mouth Disease, RT-PCR.

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