

## A STUDY ON THE GENETIC RELATIONSHIP OF MITES IN THE GENUS *SARCOPTES* (ACARI: SARCOPTIDAE) IN CHINA

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**ABSTRACT** - The status of the genus *Sarcoptes* is the subject of repeated revisions and ongoing debate. To clarify the taxonomic status of this genus, the second internal transcribed spacer (ITS-2) of the rRNA gene was investigated for the first time on 6 isolates obtained from rabbits and swine from China. The length of ITS-2 was 361bp in these isolates, and the base composition was biased, averaging 60.9 % A+T. A total of 4.16 % (15/361) nucleotide positions were variable. There were no deletions or insertions in nucleotide sequences. Homology analyses indicated that the identity levels of nucleotide of ITS-2 among the 6 isolates ranged from 96.9 % to 99.7 %. Phylogenetic analysis showed that the *Sarcoptes scabiei* (De Geer) isolates from China and other locations belonged to a single, heterogenous species.

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