

2-9. THE INCIDENCE OF THREE MAJOR DISEASES OF *APIS MELLIFERA* L. IN KOREA

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We took the nationwide survey of three main honeybee diseases, European foulbrood (EFB; *Melissococcus pluton*), chalk brood (CB; *Ascosphaera apis*), and nosema (*Nosema* spp.) in 2001 and 2002 from South Korea. The number of infected apiaries with EFB and CB examined from 21 apiaries were 9 and 13, respectively. The average percentages of infected colonies in apiaries where EFB and CB occurred were 7.4% and 12.8%. We developed the vortex-extracting method of *Nosema* spores to evaluate the average number of spores per worker bee. Over 10,000 spores per worker were observed in 10 apiaries from examined 18 apiaries. The average of number of spores per bee in infected with *Nosema* was 375,300 in the spring of 2002. The 16S rRNA nucleotides from three samples of *Nosema* spores were sequenced and compared with those in GenBank, which shows the highest nucleotide identity of 98% with *Nosema ceranae*.