無特定病原雞隻腸道糞便菌相分析

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摘要

動物腸道內的各種微生物可幫助宿主對抗外界病原,且對動物腸道內的免疫系統發展尤為重要,動物糞便的菌相分布可以一定程度代表動物其腸道菌相組成,而抗生素給予可能會影響其動物腸道菌相的改變,本研究應用 16S rRNA 基因定序技術,分析無任何抗生素給予的無特定病原(Specific Pathogen Free, SPF)雞隻其在不同週齡時腸道糞便菌相分布之差異,在小於 5 週齡的雛雞糞便中,以 Enterococcus屬為主要菌屬,而在 24 及 77 週齡成雞則是以 Lactobacillus 屬為主要菌屬。

Analysis of fecal microbiota in specific-pathogen-free

chicken

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Abstract

Animal gut microbial communities aid in protecting the hosts from pathogens and contribute to the development of the immune system of the hosts. The fecal microbiota from the gut were believed to represent those of the digestive system microbial communities. Antibiotics administered to animals may affect the gut microbiota, depending on the dose of the antibiotics used. To understand the gut microbiota in specific-pathogen-free chicken, we investigated the gut fecal microbiota in different ages of specific-pathogen-free chickens using culture-independent techniques through analysis of 16S rRNA gene sequences. *Enterococcus* spp. was the most abundant in the feces of chicks under 5-week-old, whereas *Lactobacillus* spp. was the most abundant species in 24 and 77-week-old chickens.