無特定病原(Specific Pathogen Free, SPF)動物,是指沒有附存特定 微生物及特定寄生蟲,但允許常態微生物自然定著的實驗動物。因此 SPF 動物之生產,需使用整套隔離之飼養系統,並進行相關之無特 定病原品質宣告。家畜衛生試驗所生產 SPF 雞及胚蛋已逾 30 年,主 要應用在禽用疾病之監測診斷及動物藥品之檢定,是國家動物疾病防 疫政策重要一環。本專題將以本所 SPF 雞及胚蛋之生產技術、品質 宣告及科學應用經驗進行報告。

Production and scientific applications of SPF chickens

Chang Chia-Chen

Abstract

Specific Pathogen Free (SPF) animals refer to experimental animals that do not contain specific microorganisms and specific parasites, but harbor naturally occurring microorganisms. The production of SPF animals therefore requires that they are maintained in barrier facility and under strict protocols that prevent their exposure to foreign microorganisms. The Animal Health Research Institute has produced SPF chicken and embryo eggs for more than 30 years, and they have mainly been used in the monitoring and diagnosis of poultry diseases as well as in the verification of animal drugs. It is thus an important component of the national animal disease and epidemic prevention policy. We present here a report on the production, quality control procedures and application case studies of our SPF chicken and embryo eggs.