Abstract

Avian pox has been reported in a wide range of avian species, yet nothing has been published about its prevalence and distribution in resident passerines in Taiwan. We used banding data from the Monitoring Avian Productivity and Survivorship, Taiwan (MAPS Taiwan) program from 2010 to 2012 to evaluate the prevalence of avian pox-like lesions. In total, 50 resident passerine species and 1,591 newly captured individuals were included in this study. Prevalence of avian pox-like lesions was 0.75% on average. Individual white-tailed robin Cinclidium leucurum, white-browed bush-robin Tarsiger indicus, rufous-capped babbler Stachyridopsis ruficeps, and gray-cheeked fulvetta Alcippe morrisonia, were found with lesions, and the number of cases and prevalence of avian pox-like lesions were 9 (9.78%), 1 (3.23%), 1 (0.37%), and 1 (0.28%), respectively. In contrast to most of the bird species studied which all showed a relatively low prevalence for pox virus infection, the white-tailed robin seemed to be easily infected by pox viruses. From data collected from recaptured cases, the lesions appear to last longer than two years at least. In case of an unexpected outbreak of avian pox, systematic monitoring programs of wild bird populations, such as MAPS Taiwan, would assure early detection of any such increase in the number of infected birds.

Key words: avian pox virus, Cinclidium leucurum, MAPS Taiwan, resident birds, Passeriformes

緒言

禽痘為鳥類病毒性疾病之一，其疾病發展過程相當緩慢，臨床上病徵是在鳥腳趾、脣齶或頭，或(及)在口腔和上呼吸道黏膜產生離散、增生性病變(van Riper and Forrester 2007)。禽痘為廣泛分布的野生鳥類疾病，在許多科別中已有病例報導(van Riper and Forrester 2007)。大部分禽痘感染是溫和且鮮少造成受感染者死亡，但若病變發生在眼皮或口腔、呼吸道的黏膜，則可能有相當高的死亡率(van Riper and Forrester 2007)。此外，在長期孤立的海洋性島嶼上的鳥類族群也被發現較生活於大陸的鳥類容易受到禽痘的影響，一般認爲是因爲大陸地區宿主、病媒和病毒之間已有長遠的共演化關係(Vargas 1987; van Riper et al. 2002)。夏威夷、加拉巴哥(Galapagos Islands)及加那利群島(Canary Islands)又有病例報導。