

# STICK-FAST FLEAS IN A RINGTAIL POSSUM (CASE 731.1)

### **CASE HISTORY**

An adult, female ringtail possum (*Pseudocheirus peregrinus*) with a pouch young was found moribund on a step. The animal died shortly after being admitted to a wildlife rehabilitation centre.

### **CLINICAL EXAM**

The possum has a severe infestation of stick-fast fleas around the ears and head (Fig 1). The animal has very pale mucous membranes, and it appears to be anaemic and hypothermic. The teeth are in good condition and are only mildly worn. The pouch contains two small pouch young.



Fig 1. Stick-fast fleas on the ear pinna: a common site for attachment

### **GROSS PATHOLOGY**

**External findings:** A very large number of stick-fast fleas coat the internal and external surfaces of the pinna and are scattered throughout the skin of the head. The pinnae are alopecic. The oral mucosa is pale. The pouch contains two 3 cm long furless pouch young.  
Hydration: poor, Fat deposits: poor, Muscle mass: reduced

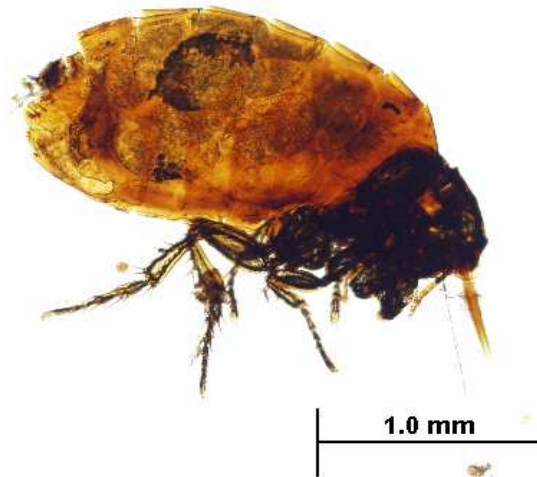


Fig 2. *Echidnophaga myrmecobii* – stick-fast flea, whole mount 40x



Fig 3. *Echidnophaga myrmecobii* whole mount 100x

**Internal findings:** The carcass is markedly decomposed (the animal died overnight and it was sitting under a heat lamp). A stable pink froth is evident within the airways. The hepatic parenchyma is diffusely grey and nodular. The gastrointestinal tract contains scant ingesta. The internal organs are diffusely pale. Blood within the cardiac chambers is unclotted and dilute.

### **MORPHOLOGICAL DIAGNOSIS**

Anaemia  
External parasitism – stick-fast fleas - *Echidnophaga myrmecobii*  
Pulmonary oedema

### **COMMENTS**

The possum appears to have suffered anaemia due to a very heavy infestation with stick-fast fleas. Ringtail and brushtail possums can become heavily infested with stick-fast fleas, which are most notable along the margins of the ears. These parasites consume blood and can cause anaemia when the host is severely parasitised. Severe parasitism with stick-fast fleas most often accompanies pre-existing injury, illness or behavioural abnormalities that prevent normal grooming behaviour.

