



## Suidasia Mite Found from the Human Ear 【Scientific note】

### 發現於人耳中的皺皮蟎【科學短訊】

Chyi-Chen Ho\* Chuan-Song Wu  
何琦琛\* 吳傳頌

\*通訊作者E-mail: [ccho@wufeng.tari.gov.tw](mailto:ccho@wufeng.tari.gov.tw)

Received: 2002/06/28 Accepted: 2002/10/11 Available online: 2002/09/01

#### Abstract

A small mite population was found around and on the tympanum of a married woman. Mite specimens of the adult female, adult male, nymph, and egg were seen in the sample. Slide specimens were made from only the adult mite specimens which were in good shape, and these are described. The mite was identified as *Suidasia pontifica* Oudemans. However, the supra coxal seta of this mite branches from its base, and both branches are pilose. This character was not mentioned by Fain and Philips (1978).

#### 摘要

在不時為耳鳴困擾的病患耳中鼓膜處發現有蟎的族群，樣品中找到雌成蟎、雄成蟎、若蟎及卵。僅有成蟎做得好的玻片標本，而描繪於本文。此蟎經鑑定為洗出後發現為 *Suidasia pontifica* Oudemans。然而它的 supra coxal setae 自基部處即分成二支，二個分支皆呈多毛狀 (pilose)，此一特性未曾被 Fain and Philips (1978) 提及。

**Key words:** ear, human, mite

**關鍵詞:** 耳朵、人類、蟎

Full Text: [PDF\(2.7 MB\)](#)

下載其它卷期全文 Browse all articles in archive: <http://entsocjournal.yabee.com.tw>

## Suidasia Mite Found from the Human Ear

Chyi-Chen Ho\* Department of Applied Zoology, Taiwan Agricultural Research Institute, Wufeng, Taichung, 413 Taiwan

Chuan-Song Wu Department of Otolaryngology, Taipei Municipal Chung-Hsin Hospital, Taipei, 103 Taiwan

### ABSTRACT

A small mite population was found around and on the tympanum of a married woman. Mite specimens of the adult female, adult male, nymph, and egg were seen in the sample. Slide specimens were made from only the adult mite specimens which were in good shape, and these are described. The mite was identified as *Suidasia pontifica* Oudemans. However, the supra coxal seta of this mite branches from its base, and both branches are pilose. This character was not mentioned by Fain and Philips (1978).

**Key words:** ear, human, mite

### Introduction

A married woman complained of a

buzz which frequently occurred in her ear. She went to the Taipei Municipal Chung Hsin Hospital for diagnosis. During

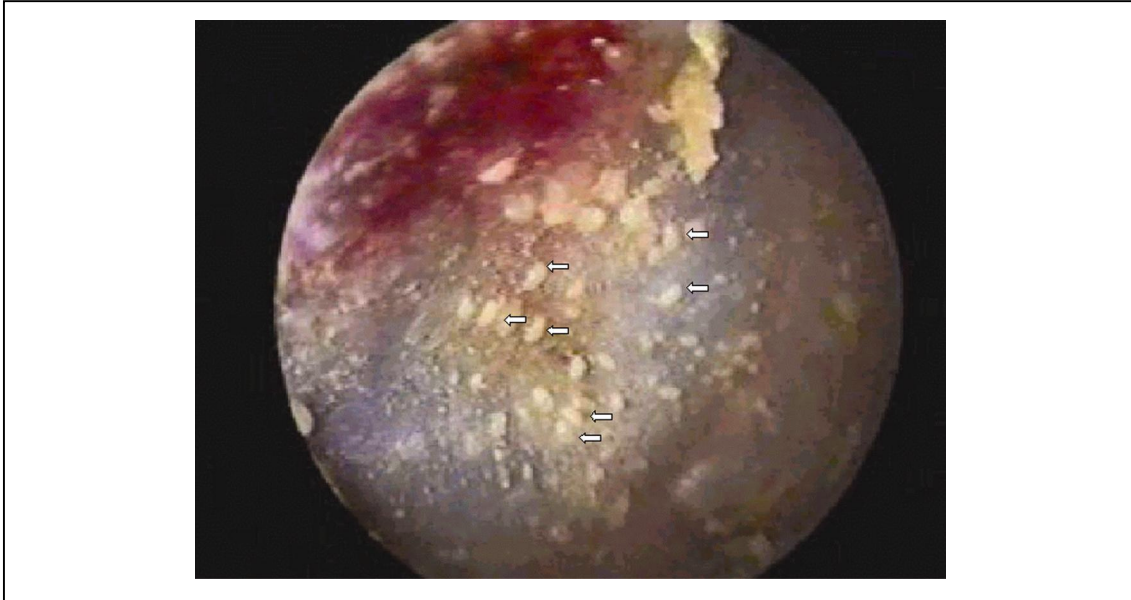


Fig. 1. Mites on the tympanum. Several large individuals are indicated by arrows

\*Correspondence address  
e-mail: ccho@wufeng.tari.gov.tw

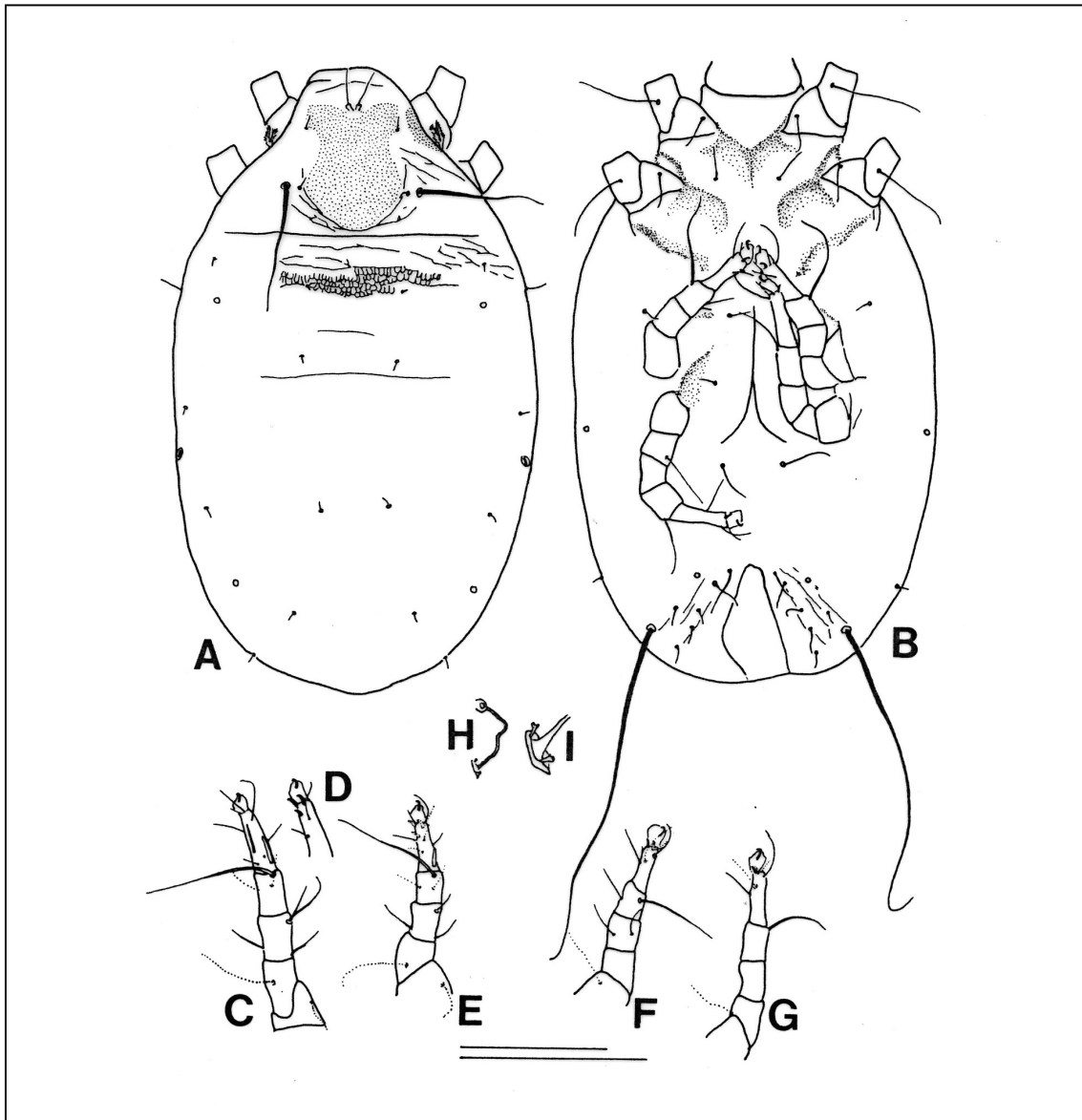


Fig. 2. *Suidasia pontifica* female, only a small part of the cuticular wrinkles are drawn. A. Dorsal view; B. ventral view; C. leg I, dorsal lateral; D. tarsus I, ventral view of the distal part; E-G. legs II-IV; H. receptaculum seminis; I. magnification of the basal disc of the sacculus. Longer bar represents 50  $\mu$  m in I. Shorter bar represents 100  $\mu$  m in the other figures.

inspection with an otoscope, the second author found a mite population inside the ear canal of the patient, around and on the tympanum (Fig. 1). The mite specimens were finally sent to the first author for identification. It was identified

as *Suidasia pontifica* Oudemans, and is described herein. All measurements are in microns. The range is provided when available in parenthesis after the mean. Setal nomenclature of Fain (1963) is followed.

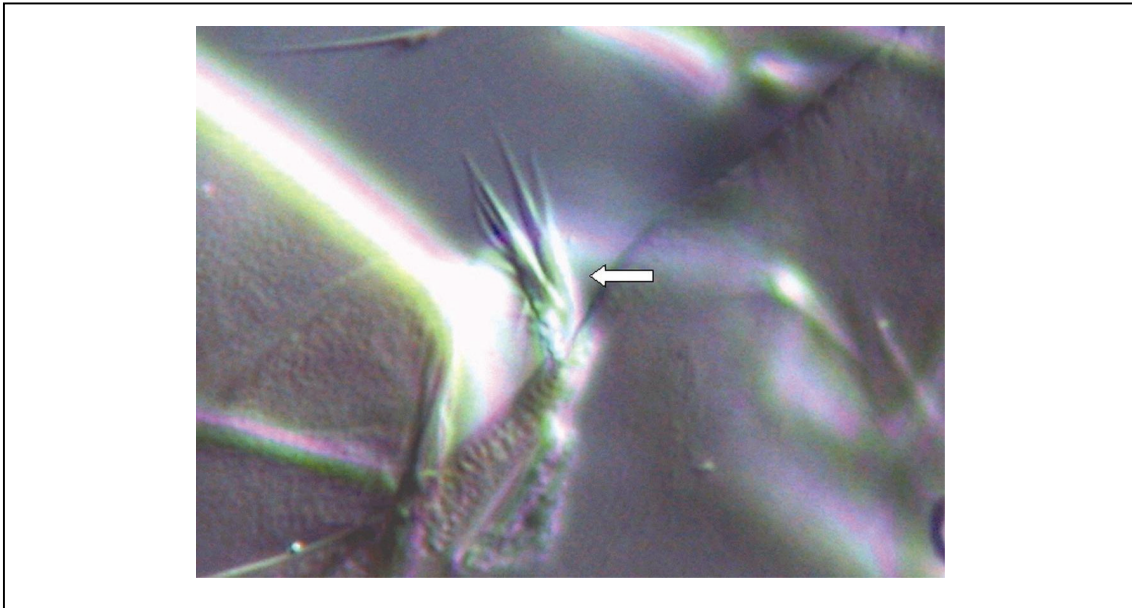


Fig. 3. Bifurcated pilose supra cox seta.

## Description

Female (measured 3 individuals) (Fig. 2): Idiosoma 401.1 (393.3-406.7) long, 248.9 (233.3-263.3) wide. Length of propodosomal setae: vi 17.3 (6.67-24.4), ve 13.3 (8.9-22.2), sc i 6.4 (5.6-6.7), sc e 84.4 (77.8-88.9). Supra coxal seta pilose and bifurcated from its base (Fig. 3), 19.4 (16.7-20.0). Length of hysterosomal setae: h 21.1 (20-22.2), hv 17.4 (13.3-22.2), d1 4.4 (2.2-6.7), d2 5.2 (4.4-6.7), d3 5.0 (4.4-6.7), d4 5.3 (4.4-6.7), d5 5.9 (4.4-6.7), l1 5.6 (4.4-6.7), l2 5.0 (4.4-6.7), l3 7.6 (4.4-8.9), l4 11.1 (8.9-13.3), and l5 229.4 (204.4-246.7). Length of anal setae: a1 6.7 (4.4-8.9), a2 23.8 (21.1-26.7), a3 10.0 (8.9-11.1), a4 10.0 (6.7-13.3), a5 8.9 (6.7-11.1), a6 8.4 (6.7-11.1).

Male (measured 1 individual)(Fig. 4): Idiosoma 356.7 long and 223.3 wide. Length of propodosomal setae: vi 26.7, ve 10.0, sc i 6.7, sc e 87.8. Supra coxal setae. 13.9. Length of hysterosomal setae: h 13.3, hv 15.6, d1 6.1, d2 6.7, d3 4.2, d4

6.7, d5 8.9, l1 4.4, l2 7.8, l3 7.8, l4 16.1, l5 166.7, a1 8.9, a2 13.3, a3 14.4.

## Remarks

*S. pontifica* is characterized by the large anal sucker of the adult male. However, we noticed characters that were not mentioned by Fain and Philips (1978). The supra coxal seta in the specimens we obtained, in both the adult female and adult male, branches from the base, and the two branches are both pilose. In addition, seta cG on genu I has two small serrations approximately at the middle of its length. Grandjean's organ in our specimens was not observable. We were therefore unable to describe it.

## Discussion

Mites have been found in the external auditory canal of humans. Cho *et al.* (1999) reported *Sancassania berlesei* (Michael) from a man. Our case involved *Suidasia pontifica* from a woman. Both

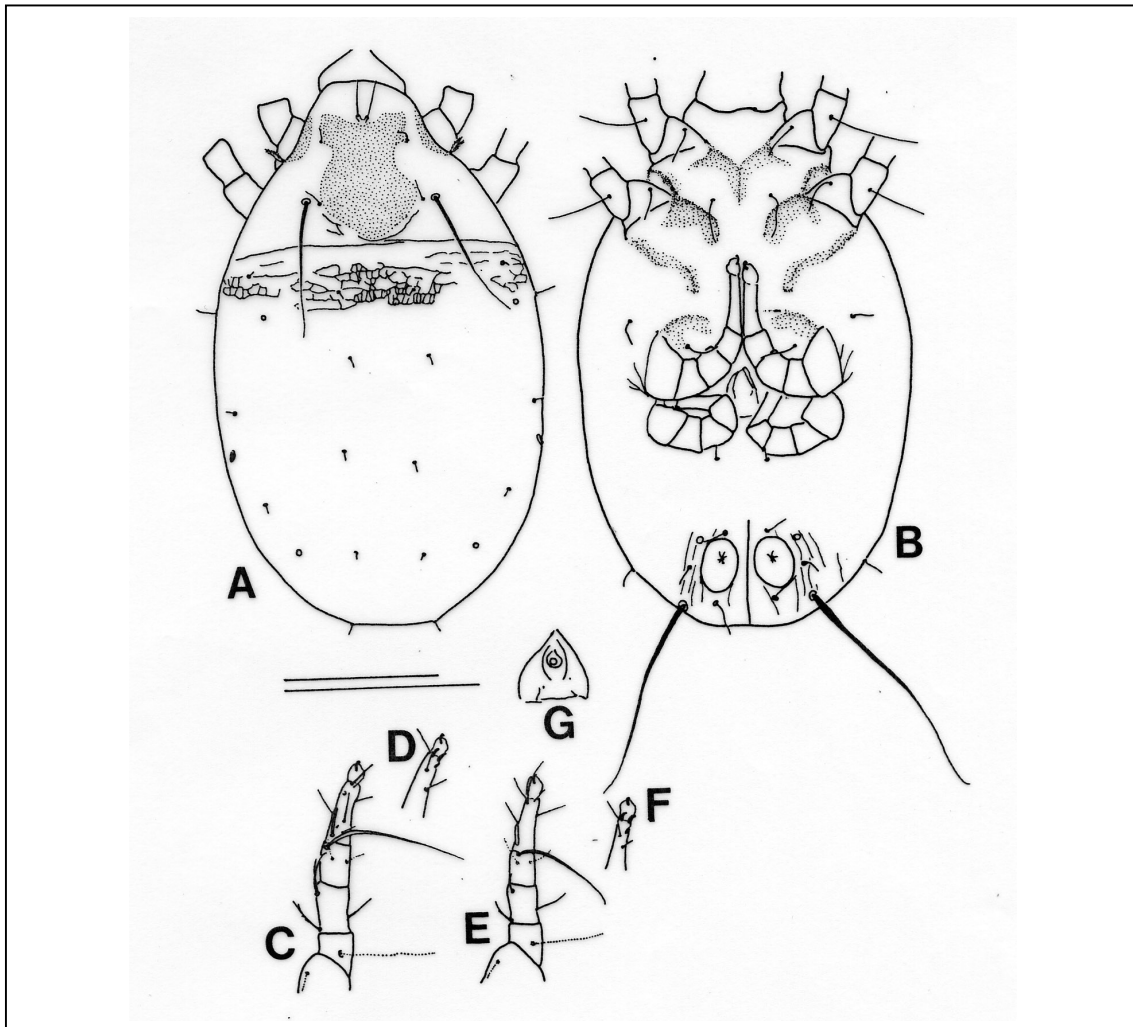


Fig. 4. *Suidasia pontifica* male, only a small part of the cuticular wrinkles are drawn. A. Dorsal view; B. ventral view; C. leg I, dorsal lateral; D. tarsus I, ventral view of the distal part; E. leg II, dorsal lateral; F. tarsus II, ventral view of the distal part; G. aedeagus. Longer bar represents 50  $\mu$  m for the aedeagus. Shorter bar represents 100  $\mu$  m for the other figures.

mites are, generally, pests of stored products. *Suidasia* mites have been reported to infest the human intestine (Martinez Maranon and Hoffmann, 1976) and pulmonary system (Sun *et al.*, 1990), or to cause dermatitis (Mumcuoglu, 1976; Samsinak *et al.*, 1989). This is the first time that a *Suidasia* mite has been reported from the auditory canal. Cho *et al.* estimated that more than three

generations of *Sancassania berlesei* had lived in the man's ear. In our case, from the sample brought to the first author, three adult females, one male, several nymphs, and many eggs were seen under a binocular microscope. It is reasonable to conclude that the mite had propagated in the patient's ear. However, we still wonder what the mites on tympanum were feeding.

## Acknowledgments

We thank Dr. OConnor of University of Michigan for his help with identification of mites.

## References

- Cho, J. H., J. B. Kim, C. S. Cho, S. Huh, and H. I. Ree.** 1999. An infestation of the mite *Sancassania berlesei* (Acari: Acaridae) in the external auditory canal of a Korean man. *J. of Parasitol.* 85: 133-134.
- Fain, A.** 1963. Les Acariens producteurs de gale chez les lemuriens et les singes avec une etude des Psoroptidae (Sarcoptiformes). *Bull. Inst. Roy. Sci. Nat. Belgique* 39: 1-125.
- Fain, A. and J. R. Philips.** 1978. Notes on the genus *Suidasia* Oudemans, 1905 with descriptions of a new species from Australia (Acari, Astigmata, Saprogllyphidae). *Int. J. Acarol.* 4: 115-123.
- Martinez Maranon, R. and A. Hoffmann.** 1976. Three cases of human intestinal infestation by mites in southern Veracruz. *Rev. Invest. Salud Publica* 36:187-201 (in Spanish).
- Mumcuoglu, Y.** 1976. Acaro-dermatitis. *Schweizerische Rundschau Med.* 65: 101-104 (in German).
- Samsinak, K., M. Pejcoch, and E. Vobrazkova.** 1989. Mites of the genus *Suidasia* as the causative agent of dermatitis. *Anzeiger Schadlingskunde Pflanzenschutz Umweltschutz* 60: 113-115.
- Sun, X., X. B. Chen, and S. F. Hu.** 1990. Detection of serum immunoglobulins in pulmonary acariasis patients. *Chin. J. Parasitol. Parasitic Dis.* 8: 131-133 (in Chinese).

*Received June 28, 2002*

*Accepted October 11, 2002*

# 發現於人耳中的皺皮蟎

何琦琛\* 農委會農業試驗所應用動物系 台中縣霧峰鄉中正路 189 號  
吳傳頌 台北市立中興醫院耳鼻喉科 台北市鄭州路 145 號

## 摘 要

在不時為耳鳴困擾的病患耳中鼓膜處發現有蟎的族群，樣品中找到雌成蟎、雄成蟎、若蟎及卵。僅有成蟎做得好的玻片標本，而描繪於本文。此蟎經鑑定為洗出後發現為 *Suidasia pontifica* Oudemans。然而它的 supra coxal setae 自基部處即分成二支，二個分支皆呈多毛狀(pilose)，此一特性未曾被 Fain and Philips (1978)提及。

**關鍵詞：**耳朵、人類、蟎