

# The type specimen of *Argiope leucopicta* Urquhart, 1890 (Araneae: Araneidae)

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## ABSTRACT

The holotype of *Argiope leucopicta* Urquhart, 1890 (= *Cyrtophora leucopicta* (Urquhart, 1890)) has been located at Canterbury Museum. An examination of this specimen shows that *C. leucopicta* is a junior synonym of *Cyrtophora moluccensis* (Doleschall, 1857).

## KEY WORDS

*Argiope leucopicta*; *Cyrtophora leucopicta*; *Cyrtophora moluccensis*; Fijian spider; holotype; synonymy.

## INTRODUCTION

Arthur Torrane Urquhart was New Zealand's first resident arachnologist who described almost 200 species of New Zealand spiders (Nicholls *et al* 2000). On 21 December 1899, what remained of his collection was gifted to Canterbury Museum and Nicholls *et al* (2000) listed 84 of Urquhart's type specimens as being held there. Urquhart (1890) also described *Argiope leucopicta* Urquhart, 1890 from Fiji, which he originally spelt as *Argiope leuco-picta*. Urquhart's description was based on a single female specimen given to him by P Goyen, an Inspector of Schools in Otago who also published several papers on New Zealand spiders (Forster 1967). Urquhart (1890) did not state how the specimen came into Goyen's care or what part of

Fiji *Argiope leucopicta* was collected from. Levi (1983) transferred *Argiope leucopicta* to *Cyrtophora* Simon, 1864, based on its eye arrangement and abdominal colour pattern and stated that the holotype of *Argiope leucopicta* was not in the Canterbury Museum, where Urquhart's types are housed, or the Otago Museum, which houses New Zealand's largest collection of spiders. The holotype of *Argiope leucopicta* was not included in the list of arachnid primary types held at Canterbury Museum (Nicholls *et al* 2000); it was subsequently found and assigned Canterbury Museum accession number 2005.135.90 in 2005.

## METHODS

The epigynum of the holotype of *Argiope leucopicta* was photographed using a Nikon DS-Ri1 digital microscope camera mounted on a Nikon AZ100M stereo microscope and images were focus-stacked using NIS-Elements D (Nikon Imaging Software). The holotype specimen was photographed using a Canon EOS 5D Mark II Digital SLR camera with a 100 mm macro lens, which was mounted on a StackShot electronically controlled macro-rail and the images were focus-stacked using Helicon Focus version 5.3.

## SYNONYMY

Below is a partial synonymy. A full synonymy can be found in Platnick (2014).

### *Cyrtophora moluccensis* (Doleschall, 1857)

*Epeira moluccensis* Doleschall 1857: 418 (description of female; type from Amboina [now Ambon Island, Indonesia], not found according to Tanikawa *et al* 2010, therefore not examined).

*Argiope leuco-picta* Urquhart 1890: 234 (description of female; holotype female from Fiji, Canterbury Museum 2005.135.90, examined). **New synonymy.**

I have examined the holotype of *Argiope leucopicta* and identified it as *Cyrtophora moluccensis* (Doleschall, 1857). The epigynum (Fig 1) is consistent with the illustration of *C. moluccensis* in Tanikawa *et al* (2010: fig 13) and the median septum of the epigynum in lateral view is curved, which separates it from the closely related *Cyrtophora ikomosanensis* (Bösenberg & Strand, 1906) (see Tanikawa *et al* 2010: Figs 9–11). The abdominal pattern also matches figure 2 in Tanikawa *et al* (2010); however, there is overlap in the abdominal pattern of *C. moluccensis* and *C. ikomosanensis*, as the latter species is variable (Tanikawa *et al* 2010). The specimen is in good condition (Fig 2) considering its age, although not all legs are attached. A label written in what appears to be Urquhart's handwriting (Fig 3) was found in the vial with the holotype specimen.

## DISTRIBUTION

*Cyrtophora moluccensis* is found from India to Japan, Indonesia, Papua New Guinea, Australia (Tanikawa *et al* 2010; Platnick 2014) and tropical islands in the South Pacific (Marples 1960, 1964; Tanikawa *et al* 2010). It has been previously recorded from Fiji (Evenhuis 2007) and neighbouring Tonga (Marples 1959).

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- Urquhart A T (1890) Description of a new species of *Argiope*, from Fiji. *Transactions of the New Zealand Institute* 22: 234–236.



Fig 1: Epigynum of the holotype specimen of *Argiope leucopicta*



Fig 2: The holotype specimen of *Argiope leucopicta*.

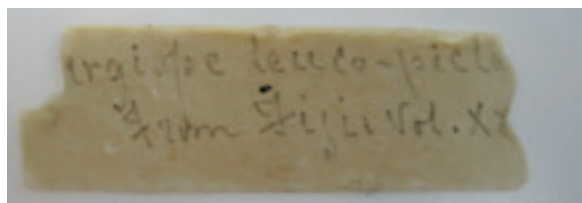


Fig 3: Label in Urquhart's handwriting found with the holotype specimen of *Argiope leucopicta*.