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THE ZIMBABWE YELLOW-BANDED SAPPHIRE *IOLAUS NASISII*: FIRST RECORD OF THIS BUTTERFLY IN SOUTH AFRICA IN MORE THAN THIRTY YEARS

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THE ZIMBABWE YELLOW-BANDED SAPPHIRE *IOLAUS NASISII*: FIRST RECORD OF THIS BUTTERFLY IN SOUTH AFRICA IN MORE THAN THIRTY YEARS

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The Kudu River Valley at Mooketsi in Limpopo Province has proven itself to be a rich hunting ground for the eager lepidopterist. Situated along the Great Escarpment, and home to a thriving farming community, a surprisingly large variety of butterfly species have been identified from the Mooketsi area – from the tiny Dwarf Blue *Oraidium barberae* to the larger Swallowtail and Swordtail butterflies, such as the Mocker Swallowtail *Papilio dardanus cenea*, Constantine's Swallowtail *Papilio constantinus constantinus* and the Large Striped Swordtail *Graphium antheus*. The Kudu River Valley falls within quarter degree grid cell 2330CA; the LepiMAP database indicates that 214 species have been recorded in this cell (Animal Demography Unit 2016).

Rather surprisingly, it was from the sleepy hollow of Mooketsi that an astounding discovery was made. While carrying a bundle of hay for my horse on 12 November 2015, I found a small, colourful butterfly (Fig. 1). The butterfly was unfortunately dead, probably having succumbed to one of the heatwaves to have gripped Limpopo during October and November. Being a keen LepiMAPper, and instantly recognising the butterfly as an important find, I scooped it up with my free hand, fed my horse and headed back indoors.



Figure 1. Zimbabwe yellow-banded sapphire as it was found with its wings folded forward.

Paging through Steve Woodhall's *Field Guide to Butterflies of South Africa* (Woodhall 2005), I realised that I needed to see both sides of the butterfly's wings if I was to make an identification. The butterfly's wings were folded forwards, so the underside of the wings were not visible (Fig. 1).



Figure 2 – Having cut away one of the wings, the underside was clearly visible for identification.

I gingerly cut away one wing to reveal the wing underside (Fig. 2). The identification was easy enough to make, but the distribution map of Woodhall (2005) indicated that the species was limited to two tiny locations in South Africa. One of these locations was identified as Buffelsberg near Munnik (Woodhall 2005), which is within close proximity to the location where I found the butterfly. Barely able to contain my excitement, I submitted the record to LepiMAP (<http://vmus.adu.org.za/?vm=LepiMAP-582581>) including my identification and awaited a response from the experts. By the next morning, there was a very excited response from the Chair of the Lepidopterists' Society of Africa, Steve Woodhall, confirming the Fig 3



Figure 3 – The larva of the Zimbabwe yellow-banded sapphire blends in extremely well with the flowers of its host plant.

identification. The butterfly was the Zimbabwe Yellow-banded Sapphire *Iolus nasisii* and the record of the butterfly was the first in South Africa in over 30 years. The species does not even get a mention in Mecenero *et al.* (2013).

In email correspondence, Steve Woodhall told me that the butterfly larvae only feed on a type of mistletoe *Tapinanthus sp.* which grows as a parasite in trees. I immediately recognised the plant, which had been growing in a marula tree *Sclerocarya birrea* near the stables for many years already and which was close to where I found the butterfly.

Reaching the mistletoe in this tree to search for eggs or larvae proved to be an enormous challenge however. I identified several other trees, all of which were marula trees, in which the parasite was growing, but the mistletoe was located in the upper tree canopy and virtually impossible to reach. Any leaves or twigs knocked down during storms were all examined for traces of the larvae. I found two empty egg cases.

I subsequently located a marula tree with a mistletoe plant which was relatively easy to reach. At first I could find nothing, but on my second attempt early the next morning, the bright yellow larva of the butterfly fell into my hand as I searched through the mistletoe flowers; the larva was extremely well camouflaged among the yellow flowers (Fig. 3).

This finding represents the first record of the Zimbabwe Yellow-banded Sapphire in South Africa for more than three decades, and confirms its occurrence. It is the southernmost record of this species (23.65°S, 30.01°E). Williams (2007) stated that the main range of this species is from Uganda and Kenya in the north, southward to Zimbabwe (from where the LepiMAP database has a record from Masvingo (<http://vmus.adu.org.za/?vm=LepiMAP-579926>)).

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