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# METAMORPHOSIS

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## President's Comments

### No Butterfly Is Worth A Friendship, and other thoughts

Steve Woodhall

2 Madeleine Drive, Gillitts 3610, KwaZulu-Natal

This is the first President's Comments I've written, and I sit here in front of the iMac with some trepidation. To repeat what I said when I accepted the job: I have huge boots to fill. During Hermann Staude's Presidency so many big achievements were made. I know he would be typically humble and not lay claim to personal credit for these things, and indeed they were all team efforts in which many people played very significant parts. But I believe it was Hermann's leadership skills that provided the yeast for the dough and that's what gives me pause. How do we move things forward from where we are now? Just to summarize a few of the achievements of the past eight years:

- The birth of SABCA
- The Memorandum of Agreement with CapeNature
- Financial stability – we may have fewer members but they are a solid base

The Lepidopterists' Society of Africa has never been better known publicly, or been held in higher regard by the conservation authorities than today. This is a direct result of the efforts of Hermann and the outgoing Council. I'm sure all of you will join me in giving them a resounding vote of thanks.

One saying (or should I say: 'cliché'?) I used above was 'boots to fill'. Well, to misquote Newton, we now have some giants' shoulders to stand on. We should be able to take LepSoc to the next stage, take a leaf out of the birders' book, and go for a much bigger membership. This will allow us to do a lot more, and I think we have a fairly narrow opportunity. As SABCA reaches a culmination, we must use our higher profile to broaden our appeal and attract many new members.

How do we go about this?

Well, here are some suggestions that came out of the 2008 Conference:

- Change the website so that it can accept electronic subscriptions payments and automatically maintain a membership database.

The first steps towards this have been taken already.

- Create a new membership grade – 'e-membership' or 'membership lite' – that allows completely electronic engagement with the Society.

This can only happen when the website has been changed to allow it.

- All members with some knowledge of butterflies and moths to take some time out and do at least one presentation per year each to a group of people who know little about butterflies but would like to learn – birders, gardeners, whatever!

A few of us have been doing this for some time, and you can see where we gave the talks by looking at the maps in the SABCA Virtual Museum – a sudden rash of dots (records) appear around the place where the talk was given.

- Develop 'LepSoc News' to the point where it can be used as the main point of communication with e-members.

John-Paul Niehaus has already got this well in hand but still has one serious challenge, as Andy Mayer always has with *Metamorphosis* – getting sufficient articles and letters. For this, I'd like to appeal to everyone to submit as much material as they can. It may only be a simple account of a day trip, or a photo of some interesting behaviour – not necessarily a long article. If you need any help with proofreading or editing, send it to me – I'll help you.

- Finally, a personal appeal – yes I'm getting to the strange title of these comments!

Some time ago, I was getting very intense about my butterfly collecting and became somewhat competitive. The reasons why are lost in time but I know I was becoming a bit of a pain in the butt!

Andrew Mayer (for it was he) was always willing to pass specimens on, if he had taken any species that his companions on a trip hadn't. He used to say, when pressed as to why he was giving away a lovely insect, 'oh... it has a few cilia missing...' but the truth came out one evening after a lot of Castle, as it so often does... Andy said to me:

### **“No Butterfly Is Worth A Friendship”**

I've put that in bold for a reason. It changed my life. I stopped getting all het up because someone had beaten me to the first (or only) specimen on a trip. I started sharing my captures. I also found that people were really willing to help me when my book-writing activities led me to switch largely to photography.

I haven't put this in just to show what a good guy Andrew is, but for another reason. For some time now there has been much acrimony about certain issues in LepSoc. I am not going to go into specifics or mention any names but they are all members of

LepSoc. If they are reading this, as I hope they are, they will know who I am talking about.

One thing I really want to see in my term as President is for these breaches to heal. I have spoken privately to some of those involved and all have indicated that they'd like to see the unpleasantness come to an end. So it really should not be that difficult for certain people to call other certain people, and make contact again as lepidopterists. We are all human and none of us is perfect, and I'd like to think it's time we all accepted that. There are so few of us at this stage that we cannot afford to lose anyone. And right now, given the challenges I've mentioned above, we need all hands to the pumps.

I'd just like to say to them that Andrew's saying can be applied not only to a dead specimen in a plastic envelope, but to a name in a scientific paper or an entry in a database – No Butterfly Is Worth A Friendship, indeed. Please, guys, get together and be reconciled!

Steve Woodhall

## Letter to the Editor

### A new food plant record for *Euchrysops barkeri* (Trimen, 1893) (Lycaenidae: Polyommatainae)

Steve Woodhall

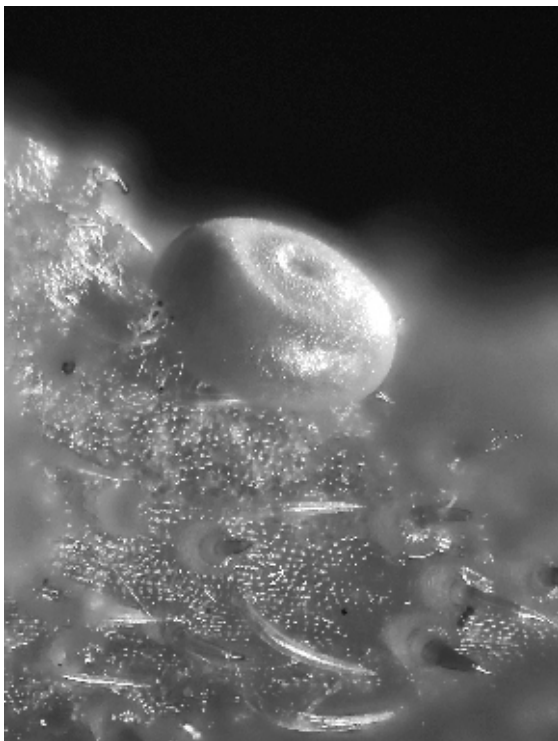
2 Madeleine Drive, Gillitts 3610, KwaZulu-Natal

On Saturday, 21 February 2009, I was exploring Umdoni Park near Pennington, KwaZulu-Natal (Lat. 30°23'34.14"S, Long. 30°41'15.69"E, Alt. 58 m).

I watched a female Barker's Blue *Euchrysops barkeri* hovering around a specimen of the Wild Sweet-pea bush *Sphenostylis angustifolia* Sond. (Fabaceae). After a short while she settled on the plant and laid a single egg on a stem, close to one of the flowers. The egg is shown in the figure below:

As can be seen, the egg closely resembles the drawing shown on Plate 2 of *Life Histories of the South African Lycaenid Butterflies* by Clark and Dickson (Purnell & Sons, Cape Town, 1971). The egg is quoted there as being white on laying; this egg was pale sky-blue with a sparkling pearlescent lustre. I can find no references to this plant being utilized by this butterfly.

Unfortunately due to pressures of travel, I was unable to provide fresh food plant for the larva on eclosion; the plant developed mould and the egg failed to eclose.



*Euchrysops barkeri* Egg: S. Woodhall

## Letter to the Editor

Alf Curle

P. O. Box 477, Jukskei Park, 2153, South Africa

I refer to the article by Bennie Coetzer on Lepidops (*Metamorphosis* Vol 19 No 4, December 2008.)

There is no doubt that Lepidops is a fantastic tool and has come a long way. That it will develop further is most encouraging. It still has teething problems. In brief I am having difficulty with my GPS readings being automatically changed by the program to its own language. This, for me, is very frustrating. I would also like to see some of the reports developed as I have difficulty in getting out what I feel I need. It might well be that I cannot use the existing programs properly as I am certainly not a computer expert. Since inception I have been requesting that I be enabled to use my own photographs as at each update all individual photographs are eliminated and pictures revert to Lepidops standard supply. Now there may be nothing wrong with the pictures available but I have a strong preference for seeing and using my own material.

The use of Lepidops and Lepibase seems to have grown in importance with the advent of the SABCA Project. LepSoc Council have thrown a real wobbler at ordinary members by not adequately informing them of the separate requirements and time frames required by SABCA and the Amnesty Application to Western Cape Nature Conservation.

The Amnesty deadline was the middle of last year. This has certainly changed my whole approach and in order to comply with the Amnesty requirements as quickly as I can the data capture process has been speeded up considerably by the use of spread sheets. Whether there will now be time to capture the data twice on spread sheets and on Lepidops remains to be seen.

I feel one statement made by Bennie needs clarification and that is (talking of Lepibase) he says "LepSoc is the owner of the data". I know I have been out of touch but I cannot recall anything in the constitution or elsewhere to that effect. In the grand scheme of things how will ordinary members have access to all this information? Will each piece of information be acknowledged, e. g. CCSA (Curle Collection South Africa)? From a conservation point of view, and where information is very sensitive, there may be merit in not placing all records in an open forum. Perhaps certain information can be flagged and only released to persons doing research on a particular species? Has Bennie and/or the Council given any thought to this or do they feel that the bases have been covered by the constitution and code of conduct?



And then lastly there is the question of the Groups. My information on these is very limited so please forgive me if I get it wrong. I believe Bennie is in "charge" of Butterflies and others in "charge" of moth sections. Are these on Lepibase and is it inside the parameters of LepSoc? Who has access and how is this accomplished? I am more than happy to contribute data, pictures and specimens if necessary but would be most grateful if I could use the information for identification purposes. How does one approach the matter?

Kind regards, Alf Curle.

## Addendum to Heath *et al.*, 2008: Oviposition behaviour and foodplant observations

A. Heath (alan.heath3@virgin.net) and A. Gardiner (aegard@zol.co.zw)

In the paper on some life history observations it was stated that *Aloeides damarensis damarensis* (Trimen, 1891) was possibly aphytophagous. This is now seen to be unlikely.

*Aloeides damarensis* is very common and widespread in Botswana. The first observation (AG) was made from a large colony (at least 2 km in length and 0.5 km in width) along the Palapye - Martin's Drift road (59-61 km pegs). It was at the end of February 2001 and on an overcast and cool day, the laying behaviour was seen at 16:00 hrs. Even at this time the butterflies were quite active (it should be mentioned a cool day in Botswana at this time of the day in February can be 25-30 °C). A female *A. damarensis* displaying laying behaviour landed on the foodplant *Waltheria indica* L. (Sterculiaceae). Adults were also seen to use this plant as a nectar source. She crawled down the plant and onto the ground. The female walked across the ground dragging the end of her abdomen over the ground. She stopped on a number of occasions but did not lay any eggs. After wandering away from the plant she turned and returned towards the plant. Still dragging her abdomen, she found a 'suitable' spot, on the soil surface, pushed her abdomen slightly into the ground and laid a blue egg. She then used her hind legs in an attempt to kick a bit of soil over the egg, moved slightly and repeated the process. She moved again, closer to the base of the plant and laid more eggs in the same manner, this time being more successful in covering the eggs with a few grains of sand. When she was near the plant and laying eggs, *Pheidole* (Myrmecinae) ants crawled over her abdomen. After she flew off, closer examination revealed a colony of *Pheidole* ants at the base of the plant, which had constructed a nest around the roots of the plant. Most of the *W. indica* plants in the area had ant colonies at their base. Larvae at various stages of development were found on the roots or the base of the stem. Pupae were also found loosely attached to the plant roots, the ants having made empty spaces around the roots.

The second observation (AG) on *A. damarensis* was made in January 2004 near Kataba in Western Zambia. After locating a colony of *A. damarensis* it was noticed the *Gnidia kraussiana* Meisn. (Thymelaeaceae) plants in the vicinity of the butterflies showed signs of heavy feeding. Ant colonies of the genus *Pheidole* were found at the base of these plants. Just below the soil surface, at the base of the plants, where the plant stems and roots grew through small open chambers, larvae and pupae were found. Pupae were also found attached to the roof of a chamber, hanging upside down. Ants were crawling and stopping on both the larvae and pupae.

Observations (AG) on *Aloeides molomo coalescens* Tite & Dickson, 1973 were made at Headlands along the main Mutare-Harare road, Zimbabwe. In mid

September 2000 there were many specimens flying on a sunny but windy day, the observations were made at 11:00 hrs. For the years 1999-2004 the area had been burnt in August/September every year. During this period the colony was strong. The area is also likely to have been burnt over many years preceding the observation period. A number of female *A. m. coalescens* were observed laying eggs. The females were seen fluttering in the manner typical of butterflies when they are searching for their foodplant. A female would land on the foodplant, *Gnidia* sp. (probably *G. involucrata* A. Rich.), walk down the stem of the young shoots to the base of the plant and would then walk on the ground next to the plant. The young shoots of the plant had recently pushed through the soil surface and this area of the ground was fairly loose. The female pushed her abdomen down into the soil by telescoping her abdomen. The eggs were laid beneath the surface of the soil and could not be found.

*Aloeides simplex* (Trimen, 1893) is common in certain parts of Botswana. There are many colonies from Sekoma to Ghanzi, along the Trans Kalahari highway. The following observations (AG) were made in April 2003 two kilometres north of Kang, the conditions were sunny with a moderate wind and as in *A. damarensis* the observation was made at 16:00 hrs. A female landed on the ground near the foodplant *Melolobium microphyllum* (L.f.) Eckl. & Zeyh. (Fabaceae) and sat for some time, her antennae on occasions making a down and forward movement. After a minute or two the female moved towards the plant and once again remained motionless. A few ants made contact with the female and at this she moved forward to the plant (her hind wings making an alternate up and down movement). She positioned herself so her abdomen was towards the base of the plant (approx. 8 mm from base) and pushed it slightly into the soil. After laying an egg, she moved her legs with a digging motion then moved away and flew off. She visited a number of other *M. microphyllum* plants but after waiting at them for some time, and on occasion moving towards them, flew off without laying. These plants did not seem to have the correct ants. The egg was not found, probably because the observer first followed the female before returning to the spot. It presumably looks very similar to a grain of soil and may have been buried slightly below the surface.

In September 2008 at Leipoldtville (Western Cape Province of South Africa) (32°13.678'S 18°28.098'E), a *Chrysores* pupa was found (AH) in a piece of curled-up papery skin on the trunk of a *Tylecodon paniculatus* (L.f.) Toelken (Crassulaceae); the pupa was attended by *Crematogaster peringueyi* For. ants. It eclosed as a female *C. thysbe osbecki* (Aurivillius). None of the previously known foodplants of this butterfly were anywhere near the *T. paniculatus*, which hence is assumed to have been the foodplant used.

During the same month, at Groenriviermond (Northern Cape Province) (30°51.869'S 17°35.524'E) a *Chrysores* larva and two pupae were found (AH) beneath a plant of *Atriplex bolusii* C.H. Wright (Amaranthaceae) attended by *C. peringueyi* ants. They later eclosed as *C. perseus* (W.H. Henning).

In September 1990 and 1991 pupae of *Chrysoritis thysbe psyche* (Pennington) were found (AH) beneath a species of *Roepera* A. Juss. (Zygophyllaceae) and attended by *C. peringueyi* ants on the southern face, near the apex of a small hill 2 km north of Nuwerus in the Western Cape (31°07.757'S 18°21.084'E). In September 1992 at the same locality *C. t. psyche* pupae were found beneath a species of *Thesium* L. (Santalaceae) and attended by *C. peringueyi* ants (Mike Schlosz, pers. comm.). These additional foodplant records further demonstrate the wide range of larval foodplants utilised by *Chrysoritis* species.

## References

- HEATH, A., MCLEOD, L., KALISZEWSKA, Z.A., FISHER, C.W.S. & CORNWALL, M. 2008. Field notes including a summary of trophic and ant-associations for the butterfly genera *Chrysoritis* Butler, *Aloeides* Hübner and *Thestor* Hübner (Lepidoptera: Lycaenidae) from South Africa. *Metamorphosis* **19**(3): 127-148.

## Two specials in two weekends – rediscovering *Lepidochrysops lotana* and *Dingana fraterna*

Mark C. Williams

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From Thursday the 23<sup>rd</sup> to Sunday the 26<sup>th</sup> of October 2008 we had a family reunion at the Makhutsi River log cabins in the Lekgalameetse Nature Reserve in the Wolkberg Mountains. My two eldest daughters flew out from London; Bronwyn and her husband Brian *en route* to Australia and Carmen for an extended visit to South Africa. My mother, my wife Tildie, youngest daughter Gisela, ex-wife June and her partner Andre, and three Johannesburg friends of Brian's, completed the party. Clearly this was not intended to be a "butterfly trip".

We arrived on Thursday afternoon in cool, cloudy weather and had a huge braai-fest in the evening – alcoholic beverages flowed faster than the Makhutsi River. Friday morning dawned crisp and clear. I had (secretly) planned to drive up the Orrie Baragwanath Pass to the Downs should the opportunity present itself, mainly to look for *Dingana clara* and *Lepidochrysops tantalus*, so I went round from cabin to cabin looking for souls keen to "do a walk on the Downs". June, Bronwyn and Brian were rearing to go so the four of us set off to the top of the mountains, with Bronwyn revelling in driving 'silver lorry', as our Honda CRV has been fondly christened by Tildie. We arrived at the top at about 10:00 in glorious weather – hot, cloudless and windless.

I headed for some interesting hills and ridges which had been burnt and were verdant green, with scattered bush clumps among the rocky places. Shortly after arriving at the top of a ridge I spied a fast-flying smallish dark blue *Lepidochrysops* and a few seconds later a perfect *tantalus* male was in the net. I had just shown the specimen to the rest of the gang, who had by now arrived at the top, when another blue flew past a few metres in front of me. My immediate reaction was that it was another *tantalus* but something did not gel. This critter was too large, too pale and had a more steady flight than the erratic flight of *tantalus*. By now it was 10 metres from me and I gave chase. A hectic 50 metre sprint later, followed by a Chinese swipe that would have made a ballerina blush and Steve Woodhall proud, it was in the net. On trapping it in the folds of the net and seeing the flat grey underside colouration and the small basal black spots on the hindwing underside I knew this was not a *tantalus*. It looked like a bloody *lotana* – but could it be? Here of all places?!

Trembling-hand syndrome set in and I had quite a hard time dispatching it without ripping it apart because of violent hand-spasms. Looking at it in my cupped hand, once I had removed it from the net, convinced me in an instant in regard to its identity – *lotana* at last!! Much whooping, jumping around and similar idiotic behaviour



ensued – all dutifully (and gleefully) recorded on a Sony DigiCam by Bronwyn. This is not the sort of footage you want your grandchildren to see. June and Bronwyn were not too fazed by my antics, both knowing me so well, but Brian's jaw was somewhat slack and I can only imagine what thoughts were going through his mind apropos his new father-in-law. He could well have been contemplating his future children's genetic legacy. I really missed not having my collecting buddies there, particularly the Dobsons and Owen Garvie. It would have been so good to share the moment with people who REALLY could have understood how excited I was.

No further specimens of *lotana* were found on this ridge so I climbed to the top of a slightly higher ridge a little further north. Here *L. tantalus* was quite common, with both fresh males and females present. A further four males of *L. lotana* were noted patrolling contours just below the top of the ridge, which had a fair amount of flowering *Becium* (larval plant for both *tantalus* and *lotana*) growing on the slopes. All five *lotana* males were fairly worn, indicating that peak emergence had probably occurred in mid-October.

The lotana blue was discovered on the Farm Rietvlei, south of Pietersburg (Polokwane) by David Swanepoel in 1959 and formally described by him in 1962. For the next 20 years specimens were regularly collected from the type locality, on the western slopes of the Ysterberg, but in recent years no one seems to have found it there. Jeremy and Chris Dobson and I have religiously combed the type locality in October for the last few years with nary a sighting of the species. We also noted that the area was overgrazed and that fires had become less frequent. Consequently, *Becium* plants had become rare. We believe that *lotana* is probably extinct at the type locality. Some years ago Nolan Owen-Johnston showed me a female *Lepidochrysops* that he had taken at the *Orachrysops regalis* spot on the Strydpoortberge above Zion City and I agreed with him that it was *L. lotana*. Other collectors who were shown the specimen averred that it was not *lotana* and that it might be a female of *L. patricia*. To my knowledge no further specimens of 'lotana' have been found in the Strydpoort Mountains. My finding of *lotana* on the Downs, 30 km as the crow flies from the *regalis* spot, shows that the species is present in both the Strydpoort and Wolkberg Mountains, which converge in the Wolkberg Wilderness Area south of Serala Peak.

I have plotted the way points of these three localities on the Digital Vegetation Map that comes with the Mucina & Rutherford publication *Vegetation Types of South Africa, Lesotho and Swaziland* (2006). The type locality falls into their Vegetation Type (VT) "Strydpoort Summit Sourveld" (Gm 27) and the Downs locality falls into "Wolkberg Dolomite Grassland" (Gm 26). The locality in the Strydpoort Mountains falls into a mosaic of patches of Gm 27 and Gm 26. These two mesic grassland VTs occur in the mountains to the east of Mokopane, on the summits of the Strydpoort Mountains, and on the Wolkberg as far south as Lekgalameetse Nature Reserve. If *lotana* is consistently associated with these VTs, as I believe, its

conservation status can be safely downgraded from the current 'Critically Endangered' status that it enjoys.

Barely a week later, early on Sunday morning of the 2<sup>nd</sup> of November, I found myself barrelling down the N4 towards Witbank in Jeremy's new Pajero. Jeremy, Chris and I were on a mission to find a good locality for *Dingana fraterna* as it seemed to have disappeared from its type locality near Stoffberg over the last few years.

But, let me begin at the beginning of this story. About a year ago my wife Tildie suggested that I dispose of a number of large plastic boxes filled with enveloped butterflies that I had caught or bred but had never got round to setting. Knowing that there may be interesting goodies among the more common stuff I gave the boxes to Jeremy. A few weeks later he phoned to tell me that he had found a number of specimens of what looked like *fraterna* in one of the boxes. I was excited but not particularly surprised as these had been taken in the 1970's, long before the Henning brothers had sorted out the *Dingana* species complex, which only happened in 1996. The data on the envelopes said that they had been caught at Roosenekal but, for the life of me, I could not recall exactly where I had got them. Again, not surprising since I would have considered them to be *Dingana dingana*. We resolved to investigate this puzzle in October 2008.

My youngest brother Lionel owned a small farm in the hills west of Tonteldoos, some 15 km north-west of Stoffberg, and had told me some years ago that he had seen Dinganas flying on the hill above their holiday home. I figured that these may be *fraterna* and after consulting topographic maps and fiddling around on Google Earth realized that there is a range of fairly high hills, known as the Mapochs Hills, that runs in a north-south direction, from Stoffberg in the south to north of Roosenekal. These hills are separated by a wide flat-bottomed valley from the much higher Dullstroom-Steenkampsberg Mountains to the east.

With a strategy of sorts in place – where exactly do we look? Were we too late in the season for *fraterna*? – we drove first to some hills 5 km short of Tonteldoos. A frantic half hour of scratching around in Protea-infested rocky grassland that looked to be ideal *fraterna* habitat convinced us that we were wasting time. In retrospect it was cold and windy at the time so they may well be there. We then drove through Tonteldoos (don't blink or you'll miss it) and joined the tarred Roosenekal-Lydenburg road some 20 km later. We turned east and drove to the top of the mountains and onto the Verlorenvallei dirt road. A half hour on a rocky ridge showed that *D. alticola* was out and about at 2,100 metres. Clearly I had not caught 'fraterna' here in 1975! We back-tracked west again towards Roosenekal stopping halfway down at a likely looking spot – no success. Crossing the valley again we ascended the Mapochs Hills. I said that this is the sort of place I would have prospected as a 25-year-old, more than 30 years ago. These hills look inviting as they are grassy, with groups of massive Norite boulders and clumps of trees and bushes.

We parked on the side of the road in the 'nek', 11 km east of Roossenekal and promised ourselves an hour-long search. The Dobsons zoomed off in one direction and I plodded off in another. Forty minutes later I was smoking a cigarette and contemplating the beautiful scenery and absence of Dinganas when Jeremy came bustling across towards me. He is a man of few words but his body language is easy to read once you get to know him. He looked like a volcano about to erupt. With a broad grin on his dial and in a quiet voice he said: "Chris has found them". The rest of the day was a hot sweaty blur. Besides collecting numbers of *Dingana*, Jeremy located a strong colony of *Orachrysops*, which don't seem to be *lacrimosa* but are bright on the upperside like *regalis*. Most of the females have very little blue and fresh specimens look black in flight. We have a large series so will have a closer look at these beasties once they come off the boards. What a day!

While most of the specimens of *fraterna* had bright white postdiscal spots on the forewing upperside a number had yellowish or even orange postdiscal spots. In this respect they seem to be like *D. angusta* which also has 'white' and 'orange' forms. We considered the possibility that *angusta* and *fraterna* are conspecific but this will need a lot more research in order to provide a good answer to the question.

Looking at the Mucina & Rutherford Digital Vegetation Map, both *D. angusta* and *D. alticola* map to VT Lydenburg Montane Grassland (Gm 18) and *D. fraterna* maps to Sekhukhune Montane Grassland (Gm 19). I am at a loss to explain this, except to say that perhaps *alticola* evolved as a high-altitude sister-species of *angusta*. In their review of the genus *Dingana* (1996) the Hennings do not compare *fraterna* with *angusta* but instead compare *fraterna* with the much more northerly occurring *D. clara*. They do so because all of the specimens of *fraterna* they examined had white post-discal spots. Our finding of an 'orange' form of *fraterna* suggests that a close look at the relationship of *fraterna* and *angusta* is needed.

Finally, to all those readers who have collected either *L. lotana* or *D. fraterna*, or both, I would be very grateful to receive any label data that you may be able to provide me with, particularly dates. I intend using this data to track the 'demise' of these taxa at their type localities and will, of course, with due acknowledgement make the data available to LepSoc members and SABCA.

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## Letter from KZN

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This has been a very quiet summer so far. The weather has been miserable and wet almost non-stop since last November. We had three weeks off over Christmas and had two, yes, *two* sunny days the whole period! And even when the rain did stop, there was hardly anything flying.

To begin spring, on September 14<sup>th</sup> we went yet again to Bulwer Mountain in search of the elusive Drakensberg Brown *Pseudonympha poetula*. We dipped yet again, but Quintin Austin and I found some very nice Pennington's Protea *Capys penningtoni*. We also found Star Sandman *Spialia asterodia*, a new record for the area. The whole place looked very dry and desiccated, with the proteas taking a lot of strain. We did find (again) the Bird in the Barley pub, whose barmaid told us she lives next to a patch of forest and regularly sees little golden-orange butterflies in her garden. I e-mailed her a pic of *Chrysoritis phospor*, but I haven't had any reply yet...



Pennington's Protea *Capys penningtoni* sitting on the ground at Bulwer Mountain.

Then it was the great Gauteng adventure, reported elsewhere, where Jenny and Fran had many primary experiences, or lifers as the birders call them. Despite getting several, including Jenny breaking her duck with Hutchinson's Highflyer *Aphnaeus hutchinsonii*, they still had the gall to rev me because we dipped with Saffron

Sapphire *Iolaus pallene*.

We tried several times to get a Phinda trip to coincide with good weather, but only managed one on the weekend of 11-12<sup>th</sup> October. We stayed at Sand Forest Lodge as Phinda's Bayete Camp was full. The great hope of course was that we'd get White-spotted Sapphire *Iolaus lulua*, having seen the foodplant there the previous autumn. Well, the place was seriously dry and there were min butterflies around. We drove all over the place looking for *Oncocalyx bolusii* but none were in flower or reachable – and by the middle of Sunday when we had to give our vehicle and rangers back, we'd just about given up.

This trip was our first encounter with Aussie Andy Young, a larger-than-life character from Kangaroo Island who does work for Adelaide Museum. He was having a sabbatical living at Gumbi Lodge near Candover, and came down to Phinda to meet us all. All is grist to Andy's mill, not just boring old butterflies – I had never yet seen someone get his wee wee in a froth over tiny microleps the size of a dandruff flake. He has ultra-sharp eyes and as we slowly drove along the road back to camp, he spotted an *Iolaus* hanging around a flowering Broad-pod False-thorn *Albizia forbesii*. Next to this was a Black Monkey-thorn *Acacia burkei* in full flower. These whitish butterflies were flirting around high up in the False-thorn, and I thought...



*Iolaus lulua*: A. Coetzer

'*bowkeri* again... boring...' when one came down and settled on the *back* of a Monkey-thorn flower. Notice – not the *front*! It was edge-on to me and slowly turned around so I could see the underside. We couldn't get that close as the trees were on the



far side of the boundary fence with the Pratley Perlite mine. I was convinced it was only a well-marked Purple-brown Hairstreak *Hypolycaena philippus*, but I decided to move in for a shot anyway. As I reached for my camera it flicked its wings open and flew up into the tree. We all saw the blue upper side with its black forewing cross-bar – *lulua!*

For the next hour or so we laid siege to those two trees. Every so often one of the two specimens we saw (a male and a female) would fly high and across the road, to return later. Several of us got sightings but none were that good. Of course none of us got any photos or specimens. Andy had a very creditable go at catching one with a wild stone age slog (Ricky Ponting would have been proud of him) but eventually the clock won and we had to leave. Since then all attempts to get a trip together have been foiled by weather or lack of numbers. As I write we are trying to get an Easter trip together, as I strongly suspect this butterfly has an autumn brood.

In November, Kevin Cockburn and I did a bit of 'SABCA-ing' in the Midlands. Eschewing the usual haunts of yore, we used Google Earth and ArcView to winkle out a few spots that seemed worth visiting.

To begin with, on November 1<sup>st</sup> we went in a threesome with Kevin's wife Stella to the Loteni Pass area. We had seen a nice looking high pass from Bulwer Mountain and both Kevin and Quintin's local knowledge said it was about 2000 m and on the side of Loteni. Kevin had been there and seen some good looking vegetation. The



Clark's Widow *Serradinga clarki dracomontana* female laying an egg

pass turned out to be covered in very nice grassland, with some Clark's Widow *Serradinda clarki dracomontana* flying along the road. We also found some Grizzled Blue *Orachrysops subravus*. We spotted several farms along the way that had interesting vegetation and noted telephone numbers from their signs, for future reference. Kevin's bad knee prevented us getting high up on Loteni but we managed to get about a bit on the lower slopes.

At Twist that evening we used Google Earth to explore the Byrne Valley, and found there was a lot of high ground and forest in the area, easily reached by 4x4. So on Sunday we went to a great spot called Minerva Forest, and met Malcolm Anderson, the chap who owns the farm Cunningham's Castle. The forest itself has more Kite Swallowtail *Papilio euphranor* than I've ever seen in one place before, but all were too high for photography. There was some wonderful grassland, but little sign of *Becium* and no *Lepidochrysops* were seen. But there were some very nice Vári's Brown *Pseudonympha varii* around – mostly very hard to photograph! The usual Forest-King Emperors *Charaxes xiphares penningtoni* were around, and we trapped a Long-tailed Admiral *Antanartia schaeneia schaeneia*.



Forest at Minerva

I've been busy breeding and rearing butterflies and moths, in preparation for a new book I'm working on. These are all the common ones – Common Bush Brown *Bicyclus safitza*, Two-pip Policeman *Coeliades forestan*, Banana-tree Nightfighter *Moltana fiara* etc. I've also done some of the commoner moths, such as the hated Amaryllis Caterpillar or Lily Borer *Brithys crini*. Charles and Julia Botha kindly provided me with an egg mass of this creature, whose gregarious larvae bring new

meaning to the word 'siff'. They seem to be capable of bathing in the slime from the foodplant (*Scadoxis*) and their own copious, loose frass. They are brightly coloured and the arb little brown moth they become is somewhat of a disappointment! In the



**Amaryllis Caterpillar and its adult**

wild they devour the whole plant right down to the bulb. My lot weren't allowed to do that – they were kept in a plastic box and hand fed, and when they started to get through too many leaves I culled them drastically – no way was I releasing these!

On November 15<sup>th</sup> I went to Delville Wood and got the lovely shots of Lesser Fig-tree Blue *Myrina dermaptera dermaptera* shown elsewhere – including a weird shot of a male displaying in front of another male. That Sunday, Simon Joubert had arranged for us to go to Woodridge Estate near Michaelhouse and look for Mooi River Opal *Chrysothis lycegenes*. Simon unfortunately had to pull out but Jenny Norman, Sandi du Preez and I had a great time rambling over the sunny grassland. For a long time we only saw common



Browns but then Jenny found a Rocksitter larva (*Durbania* sp., probably *D. amakosa natalensis*). Eventually to her joy, Sandi found a Mooi River Opal. It perched obligingly for a while before disappearing completely!



**Mooi River Opal** *Chrysoritis lycegenes*

On the weekend of November 22<sup>nd</sup>-23<sup>rd</sup> I spent part of Saturday getting rained on in the Waterberg with Jeremy Dobson and Mark Williams. We gave up and retreated to Rosslyn where we found Free State Blue *Lepidochrysops letsea* in fair numbers not far from its old locality, which is now too dangerous to visit. Despite Mark's assertion that these little beasts were too turbocharged to get a picture, I succeeded – ha ha! I have to admit I only got two shots and neither was an upper side. On the Sunday I got up early and on the drive home met Kevin in the Battlefields area near Ladysmith to look for new SABCA records. Again Google Earth and the GPS came to the rescue and got us onto some very nice isolated hills – and found a nice population of Otacilia Hairtail *Anthene otacilia*.

On November 29<sup>th</sup> it was Birding Big Day, so I'd given up on seeing Jenny and co., and went up Gelengele Hill near Cliffvale to look for Basuto Skolly *Thestor basutus basutus*. No dice with the Skollies but I did find the Speckled Red *Acraea Acraea violarum*. I called Jenny to tell her so she could come and find them tomorrow, to find that she was at Shongweni because one of her team was injured, invalidating them for Birding Big Day. So she and Jill came to Gelengele and as a consolation, both got a lifer. Swanepoel's Copper *Aloeides swanepoeli* was also on the wing. We then went on to Delville Wood, which was still strangely butterfly-poor despite all



the rain we'd had. There were mud puddles and on these we found Dusky Blue *Pseudonacaduba sichela* – an unusual record for Durban. But no sign of the Fig-tree Blues, Swordtails and other butterflies we'd usually expect to see.



Speckled Red Acraea *Acraea violarum*

Keeping up with the plan to try and go SABCA-ing instead of stamp collecting, the next weekend I returned to Google Earth and re-examined the high ground near Byrne Valley. I found some very nice looking high ground above 1400 m; two spots called Cottingham Estate, and Batchelor Estate. I discovered the technique of keeping the laptop open on the passenger seat with Google Earth up on the 3G card, and using the GPS to follow the roads. It's not difficult to see where you are, and you can sniff out nice forests and grasslands on Google Earth – and use the GPS to follow the roads to get there! Both these spots have Ngongoni grassland and Afromontane forest, and looked fabulous, but almost no butterflies! We need to go back there when the butterflies start flying again.

On the moth front, there were two records last year of the rare Injured Emperor *Neobunaeopsis arabella* in the Drakensberg. Reported independently by Christeen Grant and Tony May, Adrian Armstrong commented that this moth has not been recorded by Ezemvelo KZN Wildlife for ten years.

On December 7<sup>th</sup> Kevin and I got together and went to Tugela Safari ranch, where we found plenty of butterflies. Obviously the 'thorns' weren't suffering the same



privations as the Midlands and the Coast. This was the first place we experienced the plague of Patrician Blues *Lepidochrysops patricia* that came to the drier parts of KZN this year. Every hilltop was full of males, and the females were plentiful near the Bird's Brandy *Lantana rugosa* foodplant. But that was wasn't all. At long last I was able to get a female Red Tip *Colotis antevippe gavis* on 'silicon', albeit a bit of a crop. She only allowed me one shot of her glorious pinstriped underside – as she guzzled nectar from a *Barleria* flower.



Red Tip *Colotis antevippe gavis* female on *Barleria*

Some relief was afforded by Andy Young of Kangaroo Island, who contacted me just before Christmas and came down by bus. He had a bit of a contretemps with some affirmative wealth redistributors at Durban Bus Station and lost a big chunk of his funds to them. But at least he survived and I drove down to Durban to collect him to find him with his feet under the table in an Indian Restaurant, in the nearby Workshop. On 13 Dec, I took Andy to Woodridge, with Simon Joubert and Garth Aiston. We were rewarded by lots of photos of both sexes of Mooi River Opal *Chrysoritis lycegenes*, and Amakosa Rocksitter *Durbania amakosa natalensis*.

Andy spent a few days with us, visiting the local hot spots. On the 14<sup>th</sup> we went to

Springside Nature Reserve, which true to form was a bit dead butterfly-wise. One bit of excitement was finding Modest Sylph *Astictopterus inornatus*, which I hadn't seen in the Highway area before. Andy missed a Common Fig-tree Blue *Myrina silenus ficedula*, much to his chagrin. The next day, we went around all my favourite Durban spots. I was apologizing for Delville Wood being rather dead, but Andy found lots to be excited about. He spent ages groveling in the mud looking for blues, and he did manage to bag a couple of Coast Purple Tip *Colotis erone*. Eventually I persuaded him that there might be more sport at the coast, but Kenneth Stainbank was very quiet.



Amakosa Rocksitter *Durbania amakosa natalensis*



View from Table Mountain

We had some sport on December 16<sup>th</sup> when we climbed the famous Table Mountain near Pietermaritzburg. We didn't get any good butterfly records but Andy found a little grey and white moth, whose name escapes me but it got him very excited. And we met the very hospitable Octavia Dhlamini,

who was thrilled to hear that the Gaudy Commodores *Precis octavia* that were all over her *Plectranthus* hedge, were named for her!

Later that day we went to Inchanga Hill on the way home, where we found LOADS of Basuto Skolly *Thestor basutus*. We went back at the weekend and Andy's sharp eyes found what the females were laying on – an African Potato (*Hypoxis* sp.) infested with jassids. Andy also managed to find a Yellowish Amakosa Rocksitter *Durbania amakosa flavida*, thereby confirming another colony of this scarce insect. I had always suspected it might be there.



**Andy in action at Inchanga Hill**

Andy spent quite a bit of time in Iphiti Nature Reserve whilst I was at work. He found some rare moths there; I need to find out from Andy what they were, and got me some life history material that I gratefully bred out. I was able to get Pearl Emperor *Charaxes varanes varanes* all the way from egg to adult, and photographed all the stages – including a GIF video of the adult emerging. Thanks Andy!

We took Andy back to his home during his SA sojourn, Gumbi Lodge, on 21 December. I have never seen so many Purple Gem *Chloroselas mazoensis*, or Brilliant Gem *C. pseudozeritis*. There was one hilltop where we managed to get these, as well as lots of Cupreous Hairtail *Anthene princeps*. We had a great time with Amon Ndlovu, who Andy has trained to be a butterfly guide. The plague of Patrician Blues had reached Gumbi Lodge, as well as Twin-Spot Blue *L. plebeia*. There were loads of pierids about and blues such as Cupreous Blue *Eicochrysops messapus mahallokoaena* and Ashen Smoky Blue *Euchrysops subpallida*. The latter I remember being a rare marginal species when I first got to SA – then one day in the nineties I found them swarming in the Soutpansberg. Now they are all over the north-eastern side of SA; they were common at White Elephant Lodge last year and

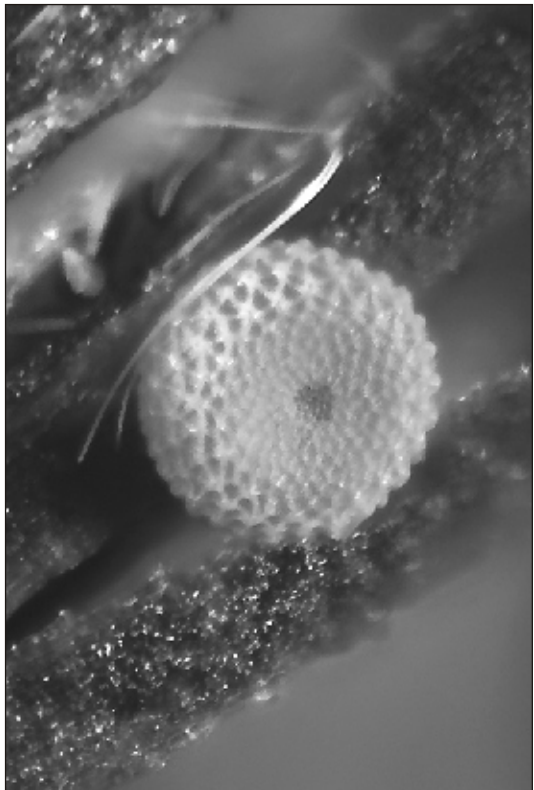
they are obviously well established in SA now.

We had a great plate of Putu with relish before we left Gumbi – Amon is a master at the art. Unfortunately this is what my Dad called a 'plate of chloroform' and I felt so sleepy on the way back, that I asked Jayne to drive. I conked out almost immediately only to be woken an hour or so later with Jayne braking heavily and being pulled over by the cops. She'd not noticed the (well hidden) 80km/hr signs as one approaches the Umfolozi River and was nabbed – 127 in a 80 zone. Fast talking avoided immediate jail, but R 2500 later I was left to rue what turned out to be a very expensive nap!

Christmas – total washout. Plus the cops had nabbed our Xmas stash, so we had to keep a low profile instead of partying. We had two days of sun in three weeks of time off. Luckily during this time Andy kept couriering stuff to me from Zululand – a lot of material was bred and I did lots of focus stacking of eggs and larvae. Stacking has really helped lift my game - you can get scanning electron microscope quality images now, in colour, with a little patience.

On January 6<sup>th</sup> I went to Burman Bush to see what was on the go. I got eggs of Striped Policeman *Coeliades forestan*, not much else! At least I now have the whole life history on the Mac in glorious stacked Technicolor.

From the 8<sup>th</sup> to the 10<sup>th</sup> of January I got sick of the rain in Gillitts and went back to Gumbi Lodge. The weather was a bit iffy and we didn't find that much new on the farm, but I met Diggs Pascoe, the co-owner. He has plans to get butterfly tourism going on the farm, and I promised to help as much as I could. We have an open invitation to stay, and we definitely need to spend more time there; it's almost certain we'll find Little Hairtail *Anthene minima*, and Andy has found Clear-wing *Acraea Acraea rabbaiae perlucida* to be common there. As Kevin and I



Egg of *Eicochrysops messapus mahallokoeana*; a 20-image stack!



found a single specimen at White Elephant Lodge last year, we now know this butterfly is not, as we thought, confined to Maputaland – it is a dry country butterfly as well.

On the 9<sup>th</sup> of January I took Andy for a Hlatikulu visit. We were able to find both sexes of East Coast *Acraea* *Acraea satis*, not in numbers but I did manage to get a photo. Andy found some Common Blues *Leptotes pirithous* laying on Rattle-pod *Crotolaria* sp., the eggs looked very different to those I got from females laying on *Plumbago* at home, but sadly the foodplant rotted before the eggs hatched. In fact I have a real problem rearing little blues, because this always seems to happen. Does anyone have any ideas on how to keep the eggs from going rotten on the plant?

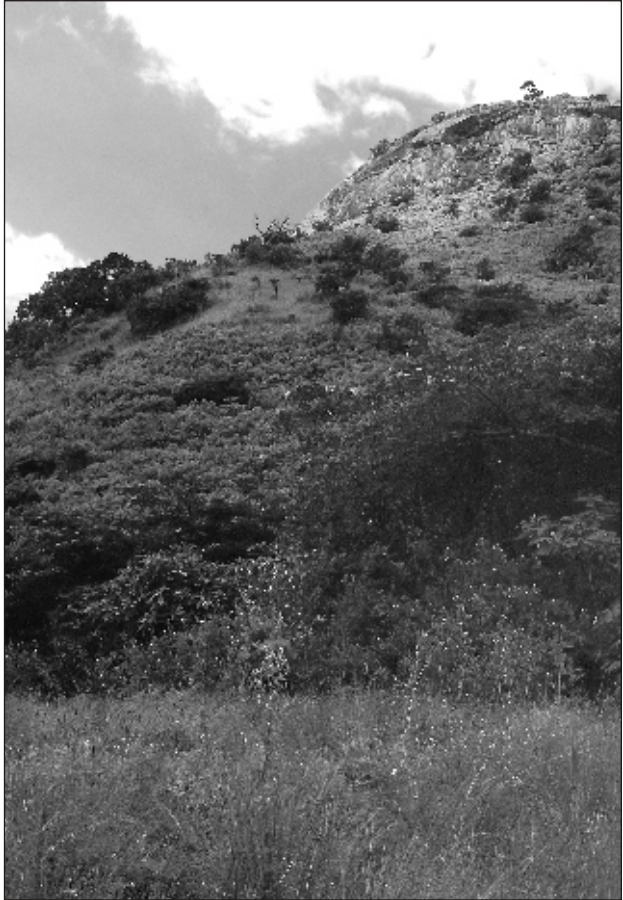
We found ourselves walking up and down the road into the forest; there wasn't a lot on the wing and what there was, was frightened of Nikon D80's. Andy was just in front of me and suddenly froze, saying 'you're going to hate me Stephen'. One swipe of his net and in it was a Natal Yellow-banded Sapphire *Iolus diametra natalica*. I persuaded him to keep her alive, and went on a search for the large *Actinanthinella wyliei* (the foodplant) I'd found last time I was there. Unfortunately no sign of it! Andy came back to Durbs with me prior to his last trip to JHB and eventually back to Oz.



Natal Yellow-banded Sapphire *Iolus diametra natalica*

On the first couple of weekends in February, I went exploring in the Lower Illovo area. The initial objective was to try and find Lou Schoeman's old Bicolored Skipper *Abantis bicolor* spot just off the Winklespruit-Umbumbulu road. In this I was

successful but sadly, the spot has been totally ruined. There is no forest left, and all I could find were loads of mealie and sugar cane fields. This part of KZN is badly overcrowded, but there are some nice places left, as I found out. I'd taken my laptop along so I could use Google Earth through the 3G card to look for likely spots – and find them using my GPS. My first find was the grassland near Nungwane. Not a lot was on the wing, but it looks very promising for spring. Then I went off down a long dirt road in a coastal direction. I could see some forests on the hills, and found some really good riverine bush. I could go no further because of a swollen river; it looked bad and there were no tyre tracks leading into it, nor could I see any on the other side. This place has some huge granite koppies, and the riverine has the air of some of my favourite spots – such as



Granite koppie near lower Illovo

Ramadipa River and Mpaphuli Cycad Reserve. Very promising.

The next week I spent scrutinizing Google Earth and Garmin's MapSource. I found a lot of high ground and what looked like unspoiled forest. So off I went in trusty Zaddachi. The first thing I did was find the other way into that nice forest I'd found the previous weekend. Then I went further inland and took another road that led into deepest darkest Africa. The first place I found was a long ridge leading to a hilltop beacon overlooking the sea. This was about 450 m above sea level and situated above a very nice Kranskloof-like indigenous forest. Its name is Hwayi, and I saw a male Little Red Acraea *Acraea nohara nohara* there. It was too fly for me to get a pic but it was a very good sign of what we might find there later in the season.





View of Rwayi Beacon from the road leading to it

I couldn't get from Rwayi to the sea, due to another raging river. But I found another really good hill called Mpongolwaya. This is very steep and high, but has a Subaruable dirt track leading to the top. This, and Rwayi, are very good looking places and if *bicolor* is still around in this area, it'll be on these hills. I did find a hilltop clearing with male Orange-barred Playboy *Deudorix diocles* and Striped Policeman *Coeliades forestan* disputing ownership of a shiny-leaved bush.

We've been rained in almost every weekend since. Kevin has been up in Zululand a lot, and has bred several species of Swordtail including Mamba Swordtail *Graphium colonna*. We all hope the weather gets drier in autumn and we'll see more butterflies...



Male Orange-barred Playboy *Deudorix diocles*

## Two new representatives of the genus *Diargyria* Krüger, 2005 from South Africa (Lepidoptera: Noctuidae: Cuculliinae)

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### Abstract

Two new species of the cuculliine genus *Diargyria* Krüger, 2005, *D. argyhorion* and *D. argyrodeixis* spp. nov., are described, increasing the number of known members of the genus to four. Whereas the previously described *D. argyrogramma* Krüger, 2005 and *D. argyrostolmus* Krüger, 2005 are distributed from the Maloti Mountains of Lesotho (where both species occur, albeit at different altitudes) to the Sneeuberge range of the Camdeboo in the Eastern Cape (*D. argyrostolmus*), the joint distribution of the new taxa extends from the Western and Eastern Cape to the KwaZulu-Natal Drakensberg.

### Introduction

The genus *Diargyria* Krüger, 2005 (type species *Diargyria argyrogramma* Krüger, 2005) was proposed for two species of cuculliine noctuids with their centre of distribution in Lesotho (the type species) and the Camdeboo mountain range of the Eastern Cape, respectively (*D. argyrostolmus*). As the description formed part of a paper concerned with new genera and species of noctuid moths from Lesotho it would not have been appropriate to include descriptions of a further two undescribed species known at the time. It is the intended purpose of this contribution to remedy this omission. The type material is housed in the Transvaal Museum, Pretoria, South Africa (TMSA).

Members of this genus have been recorded from the following four veld types in the Fynbos and Grassland Biomes (classification after Low & Rebelo, 1998): Mountain Fynbos (64) (*D. argyhorion*, *D. argyrodeixis*), South-eastern Mountain Grassland (44) (*D. argyhorion*, *D. argyrostolmus*), Afro Mountain Grassland (45) (*D. argyrostolmus*), and Alti Mountain Grassland (46) (*D. argyrogramma*, *D. argyhorion*). Whereas *Diargyria argyrodeixis* and *D. argyrogramma* have only been collected in Mountain Fynbos and Alti Mountain Grassland, respectively, *D. argyhorion* is the most widely distributed member of the genus, with an altitudinal range of more than 1500 m. The early stages and biology of all species remain unknown.

## Species descriptions

*Diargyria argyrodeixis* sp. nov., Figs 1, 2 (page 35 - black & white and back cover top & 2<sup>nd</sup> row - colour) 5, 7 (page 37)

Type material. Holotype ♂, [SOUTH AFRICA, *Western Cape*]: Citrusdal, C[ape] P[rovince], 4-13.v.1974 (F. Honiball) (dissected, TM Lep. Heter. Genitalia slide No. 12943).- (TMSA).

Paratypes (9♂ and 4♀). [SOUTH AFRICA, *Western Cape*]: 1♂, *ibidem*, 4-6.vi.1973; 3♂, 2♀, *ibidem*, 21.iv.-3.v.1974 (1♂, 1♀ dissected, TM Lep. Heter. Genitalia slide Nos 16141, 16146); 1♂, 1♀, *ibidem*, 14-18.v.1974 (♀ dissected, TM Lep. Heter. Genitalia slide No. 16142); 4♂, *ibidem*, 23-30.v.1974; 1♂, *ibidem*, 1-7.vi.1974 (all F. Honiball).- (TMSA).

**Diagnosis.** The new species most closely resembles *D. argyhorion* sp. nov. below but is distinguished from it by the less evenly dark median area of the forewings, which in addition have the cilia more prominently chequered (compare Figs 1, 2 with Figs 3, 4). In the male genitalia, both new species differ from *D. argyrogramma* and *D. argrostolmus* by the more prominently bifid apex of the valvae and the presence of a massive nail-like cornutus on the vesica. This, together with their similar habitus, suggests that they are sister species. The two new species appear to be narrowly allopatric, their respective ranges almost meeting in the Western Cape. Diagnostic differences to *D. argyhorion* in male genitalia structure include the uncus and bifurcation and swelling of the costa of the valvae, all of which are more prominently developed in the present species; the aedeagus, by contrast, is comparatively smaller (compare Figs 5 and 6). The female genitalia show pronounced differences in the shape of the bursa copulatrix, which is elongate rather than broadly elliptical in contour and lacks an appendix bursae (compare Figs 7 and 8).

**Description.** Adults (Figs 1, 2). Sexes similar. Antennae of both sexes shortly bipectinate, rami in female being still shorter than in male and not exceeding twice diameter of shaft. Wings glossy, costa of forewings nearly straight, bearing three short but distinct white striae a short distance below apex. Ground colour of wings silvery white, forewings unevenly suffused with dark greyish brown, suffusion comparatively best developed over median area; basal and terminal areas mostly dull silver. Forewing pattern consisting of nearly straight oblique basal line and postmedian, the latter strongly angled outwards at level of maculae, both lines distinct. Orbicular and reniform macula present, dull silver and not conspicuous against background; cuneiform absent. Cilia prominently chequered white-and-dull silver. Hind wings silvery white with light to moderate greyish suffusion, especially along termen; suffusion somewhat more intense in females. Markings consisting of discal spots and silvery white postmedian line only, both rather weakly developed. Cilia white, showing faint chequering only. Underside more glossy than upper side,

bright silvery white; markings faintly showing through on upper side; by contrast, markings on hind wing more distinct than on upper side. Vestiture of body light greyish brown, anal tuft small, slightly paler.

**Forewing length.** 13-15 mm (♂) ( $n=10$ ) and 13-14 mm (♀) ( $n=4$ ).

**Male genitalia** (Fig. 5). Uncus curved, comparatively short and stout, pointed and densely setose. Genital capsule resembling a Figure of Eight, with a distinct constriction at the junction of tegumen and vinculum, both parts of approximately the same length. Valvae weakly setose, curved and somewhat sole-shaped, costa distinctly swollen and with strongly bifid apex; sacculus well developed. Juxta small and rounded, posterior margin with a distinct medial notch. Transtilla prominent. Aedeagus cylindrical, slender and slightly recurved; vesica bearing a well-developed scobinate patch in addition to a single large nail-like cornutus.

**Female genitalia** (Fig. 7). Ovipositor lobes elliptical and setose, partly withdrawn into segment A8. Both pairs of apophyses fairly robust and relatively short, a. posteriores pointed, a. anteriores round-tipped. Sterigma expansive but not very clearly delineated, calyx-shaped, encompassing a small antrum of similar shape. Bursa copulatrix elongate and tube-like, very gradually widening anteriorly; posteriormost portion subtending antrum more strongly sclerotized and appearing swollen. Signum absent.

**Phenology and habitat associations.** Adults have been collected from late April to early June in Mountain Fynbos (veld type 64 of Low & Rebelo, 1998). Although this is the most widespread vegetation type in the Fynbos Biome and has been fairly extensively sampled, *Diargyria argyrodeixis* has so far only been collected at the type locality; see also Krüger (2007).

**Distribution.** Western Cape Province of South Africa, known only from the type locality.

**Etymology.** From Greek argyros, silver, and deixis, a display, referring to the forewing pattern.

*Diargyria argyrorion* sp. nov., Figs 3, 4 (page 36 - black & white and back cover 3<sup>rd</sup> & bottom row - colour) 6, 8 (page 37)

Type material. Holotype ♂, [SOUTH AFRICA, *Western Cape*]: Cape Town, May 1912 (Lord Gladstone); Pl. xxxii [fig.] 22. - (TMSA).

Paratypes (64♂ and 10♀). [SOUTH AFRICA, *Western Cape*]: 1♂, Clanwilliam, C[ape] P[rovince], 7.iv.1968 (C.G.C. Dickson); 1♀, S.W. Cape, Du Toits Kloof, 6.iv.1989 (H. Geertsema); at light; 8♂, 2♀, Kogelberg, C[ape] P[rovince] Nature

Reserve, 25-31.iii.1981 (D.M. Kroon) (1♂ dissected, TM Lep. Heter. Genitalia slide No. 16144); 1♂, *ibidem*, 1.iv.1981 (D.M. Kroon); 1♂, *ibidem*, 14-21.iii.1983 (Kroon & Molekane) (dissected, TM Lep. Heter. Genitalia slide No. 16145); 1♀, *ibidem*, 14.ii-1.iii.1983 (Kroon & Molekane); 1♀, *ibidem*, Dwars River, 14.iii.1983 (Kroon & Molekane). [**Eastern Cape**] 1♂, Port Elizabeth, iv.[19]16 (FitzSimons), Coll. Janse; NOP [meaning not clear]; 1♂, Camdeboo, Graaff-Reinet District, Farm Onbedacht, 32°10'55"S 24°03'15"E; Dry xeric slope, Alt. 1002 m, 27.xii.2002 (D.M. Kroon); 5♂, *ibidem*, Farm Onbedacht, 32°10'20"S 24°04'50"E, Wet[land]slope Alt. 1250 m, 24.xii.2002; 1♂, *ibidem*, Farm Onbedacht, 32°10'45"S 24°02'45"E, semialpine ravine, Alt. 1605 m, 27.ii.2003; 5♂, *ibidem*, Farm Onbedacht, 32°10'59"S 24°02'45"E, summit ravine, Alt. 1614 m, 27.ii.2003 (1♂ dissected, TM Lep. Heter. Genitalia slide No. 16143); 16♂, 1♀, *ibidem*, Farm Onbedacht, 32°10'59"S 24°02'45"E, ravine gorge, Alt. 1615 m, 3.iii.2003; 2♂, *ibidem*, Farm Onbedacht, 32°10'59"S 24°02'45"E, summit fynbos, Alt. 1618 m, 3.ii.2003; 7♂, 1♀, *ibidem*, 23.ii.2003; 4♂, *ibidem*, 27.ii.2003; 11♂, 1♀, *ibidem*, 3.iii.2003 (all D.M. Kroon). [**KwaZulu-Natal**] 1♀, Mont-aux-Sources Natal National Park, 9-11.iii.1961 (A.L. Acutt); 1♀, *ibidem*, 14-30.iii.1961 (A.L. Acutt) - (TMSA).

**Note.** The present species was depicted as Fig. 22 on Plate 32 in Janse (1942-48), together with three other species that were equally omitted from both the legend and the main text in Janse (1937-39).

**Diagnosis.** The new species most closely resembles *D. argyrodeixis* sp. nov. above but may be separated by the almost evenly dark median area of the forewings, which in addition have less strongly chequered cilia (compare Figs 1, 2 and Figs 3, 4). Diagnostic differences in male genitalia structure include the uncus and bifurcation and swelling of the costa of the valvae, all of which are less prominently developed in the present species, as well as the comparatively larger aedeagus (compare Figs 5 and 6). In the female genitalia, the bursa copulatrix is broadly elliptical rather than tube-like and bears a prominent appendix bursae (compare Figs 7 and 8). Whereas the distribution of *D. argyrodeixis* is limited to the Western Cape, the range of the present species extends from the Western and Eastern Cape provinces to the KwaZulu-Natal Drakensberg.

**Description.** Adults (Figs 3, 4). Sexes similar. Antennae of male shortly bipectinate, those of female very shortly bipectinate, with rami not exceeding 1.5 times diameter of shaft. Wings glossy, costa of forewings straight to very slightly concave medially, bearing a series of four short but distinct white striae a short distance below apex. Ground colour of wings silvery white, forewings unevenly suffused with medium grey-brown, suffusion comparatively best developed and nearly even over median area, weaker over basal and terminal area. Forewing pattern consisting of more or less straight and oblique basal line and postmedian line, the latter strongly angled outwards at level of maculae, forming a tooth-like projection, both lines distinct. Orbicular and reniform macula present but almost indistinguishable against background; cuneiform absent. Cilia moderately distinctly chequered white and

silvery brown. Hind wings silvery white with light to moderate greyish suffusion, especially along termen; suffusion slightly more intense in females. Markings consisting of discal spots and silvery white postmedian line only, both rather weakly developed. Cilia white, with barely discernible chequering only. Underside glossier than upper side, bright silvery white; markings faintly showing through on upper side; by contrast, markings on hind wings more distinct than on upper side. Vestiture of body greyish white, thorax approximately concolorous with forewings, abdomen slightly darker; anal tuft small, white.

**Forewing length.** 12-14 mm (♂) ( $n = 65$ ) and 13-14 mm (♀) ( $n = 10$ ).

**Male genitalia** (Fig. 6). Uncus slightly curved, slender and gradually tapering; moderately setose. Genital capsule elongate, constriction between tegumen and vinculum moderate; sides of vinculum markedly convex. Valvae weakly setose, somewhat sole-shaped; costa slightly swollen medially and with bifid apex; sacculus moderately well developed. Juxta approximately heart-shaped; transtilla prominent. Aedeagus cylindrical, tapering and recurved medially; vesica bearing a single large nail-like cornutus and a less strongly sclerotized scobinate rod.

**Female genitalia** (Fig. 8). Ovipositor lobes narrow and pointed, bearing long setae and largely withdrawn into segment A8. Both pairs of apophyses moderately robust and of approximately the same length. Sterigma forming a large, U-shaped opening around ostium bursae; antrum small and thimble-shaped. Bursa copulatrix consisting of a large and rounded, very weakly sclerotized corpus bearing a somewhat smaller but still prominent, well-sclerotized appendix bursae, both structures branching off directly from the antrum. Signum absent.

**Phenology and habitat associations.** Adults have been collected from February to May and in December. The species inhabits Fynbos in the Western Cape and various veld types within the Grassland biome further north.

**Distribution.** From the Western and Eastern Cape to the KwaZulu-Natal Drakensberg.

**Etymology.** From Greek *arguros*, silver, and *horion*, a border, referring to the distinct basal and postmedian lines delimiting the dark median area of the forewings.

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## **Gazetteer**

### **Western Cape**

Cape Town 33°55'S 18°25'E

Citrusdal 32°35'S 19°01'E

Clanwilliam 32°10'S 19°00'E

Du Toits Kloof 33°43'S 19°10'E

Kogelberg Nature Reserve 34°14'S 18°52'E

### **Eastern Cape**

Farm Onbedacht, Graaff Reinet District (several sites), approx. 32°10'55"S 24°03'15"E

Port Elizabeth 33°58'S 25°36'E

### **KwaZulu-Natal**

Mont-aux-Sources Natal National Park 29°30'S 28°52'E



Fig. 1. *Diargyria argyrodeixis* sp. nov., adult male. Scale bar in mm. (See back cover, top row for colour)

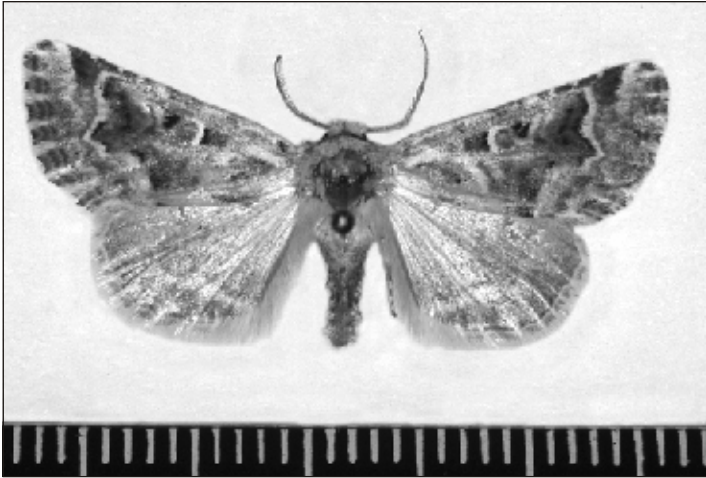


Fig. 2. *Diargyria argyrodeixis* sp. nov., adult female. Scale bar in mm. (See back cover, 2<sup>nd</sup> row for colour)



Fig. 3. *Diargyria argyhorion* sp. nov., adult male. Scale bar in mm. (See back cover, 3<sup>rd</sup> row for colour)

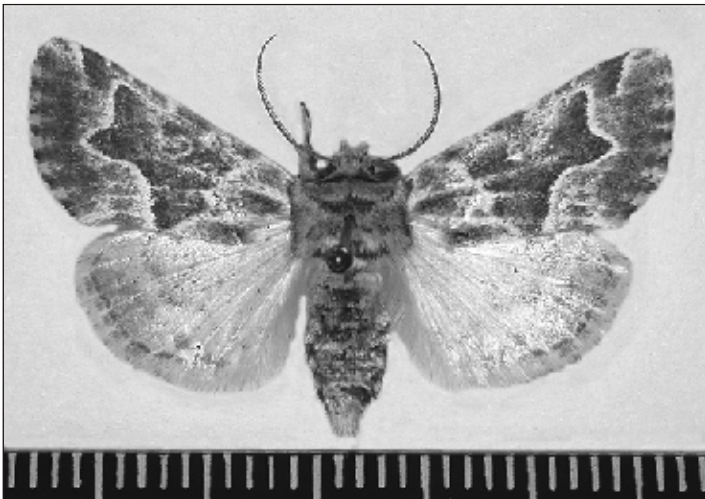
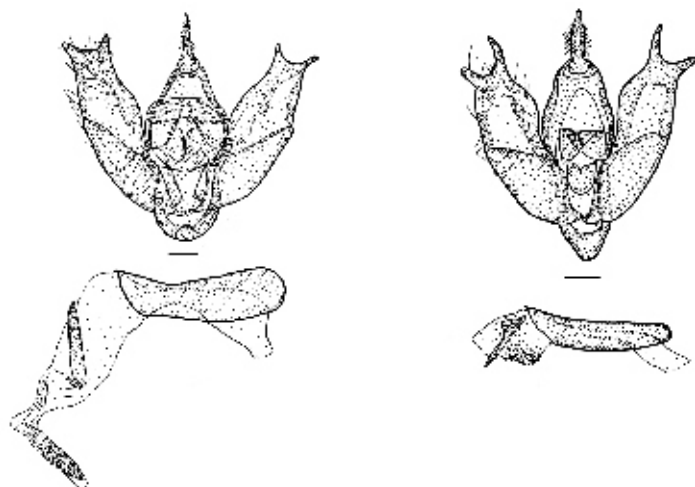
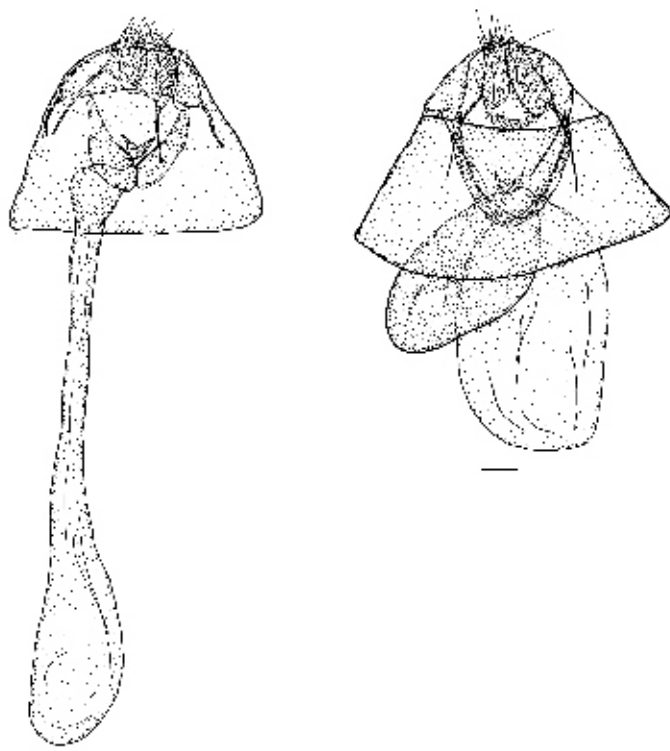


Fig. 4. *Diargyria argyhorion* sp. nov., adult female. Scale bar in mm. (See back cover, bottom row for colour)



Figs 5, 6. Male genitalia of *Diargyria argyroleixis* sp. nov. (left) and *D. argyhorion* sp. nov. (right). Scale bars = 0,3 mm.



Figs 7, 8. Female genitalia of *Diargyria argyroleixis* sp. nov. (left) and *D. argyhorion* sp. nov. (right). Scale bars = 0,3 mm.

## Strange behaviour from a *Myrina dermaptera* *dermaptera* (Scarce Fig-tree Blue) male

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A couple of weeks ago I decided to take a drive down to my old favourite hunting ground – the gorge near Delville Wood railway station, at Shongweni. It was a warm early November morning and I thought there might be some activity. As I drove along the disused rail bed that forms the track to this usually productive spot, there were few butterflies active – but I was not too fazed because I could always go somewhere else. I was really more interested in getting life history material – eggs mainly – to focus stack.

I went to have a look at the fig tree that overlooks the gorge from below the main waterfall, in case there were any *dermaptera* around. I have always wanted to get a good wild – as opposed to bred – shot of one of these. So I was a happy little soul when I found a couple of fresh males turboing around the tree, perching not too high up and pugnaciously sallying forth to patrol their territories. I found that one of them kept sitting low enough for me to gently grab the sprig he was sitting on and pull it down to camera's-eye level.

I was successful, and you can see the results on Photocamel (<http://photocamel.com/forum/macro-close-up-photography/64949-brilliant-little-blue-butterfly.html>). But then they started doing something weird. The one male started hovering in front of the other, wings buzzing so fast he turned into a glowing little blue orb. Then they took off into the blue, whirling around one another as male lycaenids so often do. After about 15 minutes they reappeared (or at least one did) and the photo shoot resumed. Not long after, the same thing happened again. This was in the high part of the tree again so I couldn't do my sneaky trick. I watched in frustration – what was the point in having a state-of-the-art digital camera with macro flash if the subject stays too far away?

After another wait, one of the males came down to a leaf about halfway up the tree. A little too far away for photography, but then down came his rival and the hovering started



Male *Myrina dermaptera dermaptera*

again. I stretched as far as I could and was able to get one shot off before they disappeared again. The result is on the post above, but here is a B+W crop of the action.



**Male *Myrina dermaptera dermaptera* hovering in front of another male**

I spent the rest of the morning haunting that fig tree, willing them to do it again – and they did a couple of times, but never in range.

So what was going on here? Both were definitely males; at first I thought the sitting specimen was a female but the second time it happened I had just been watching the sitting male opening his wings to display the tinfoil-like blue of his upperside. In fact these two were the only Scarce Fig-tree Blues to be seen on the tree that day. Was it a threat display? Maybe so – the rapid wingbeats of the hovering male look very aggressive!



## ***Azaniasis* Kemal, 2004 – a junior synonym of *Azanus* Moore, 1881 (Lepidoptera: Lycaenidae)**

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The subgenus *Azaniasis* Kemal, 2004 was described in a footnote [!] to a faunistic paper on the butterflies of the Soutpansberg in South Africa, with *Azanus isis* (Drury, 1773) as the type-species (Kemal, 2004). It is here considered a junior subjective synonym of *Azanus* Moore, 1881. The description in full reads:

“South African species in the genus *Azanus* belong to the nominate subgenus. *Azanus* Moore, [1881] has been established on the type-species *Papilio ubaldus* Stoll, 1782. In *A. ubaldus* St. upperside of male uniformly bluish violet in colour. On the underside, the markings are more or less as in *Polyommatus* or allied genera. On the other hand, *A. isis* Drury resembles superficially to the species in *Tuxentius* or allied genera. Upperside with a broad band like whitish area in the middle. Underside markings are wholly different from *A. ubaldus*. Discoidal marking, basal and subcostal round black spots, postdiscal markings are absent. Submarginal markings are in different form. *Azaniasis* (subgen. n.) with its type-species *Papilio isis* Drury, 1773 is apparently monobasic subgenus, from Guinea to Ethiopia, south to Zaire and Angola.”

Describing a new genus–group taxon entirely on the basis of differences in the adult wing colours of a single species is incompatible with 21<sup>st</sup> century taxonomy: how many genera might be made – and to some extent were made – from *Papilio* or *Charaxes* in this manner? It is true that the white band on the male upperside of *A. isis* is unusual in African Polyommatinae and it is indeed rather similar to the band of *Discolampa* Toxopeus, 1929 in the Oriental Region (a completely different genus, with very different undersides, and completely different genitalia). The underside really differs from other *Azanus* only in the greater development of the black markings, which therefore merge on the whiter background: there is no real difference in their actual composition and placement. The undersides of *Tuxentius* Larsen, 1982 actually differ significantly from *A. isis* in the markings in the basal area of the forewing and by the green-centered marginal spots of the hindwings, which link them to *Tarucus* Moore, 1881. As was shown by Stempffer (1967), the genitalia of *Azanus* differ strongly both from those of *Zintha hintza* (Trimen, 1864) and *Tuxentius*.

Stempffer (1967), in his important study of the genera of the African Lycaenidae, characterized the genus *Azanus* in some detail, discussing the differences in the shape of the valves and penis among several different species but emphasized the

similarity of the uncus, tegumen, and subunci, as well as of the overall morphology. He also stated that “*Azanus isis*, which on account of the pattern of the upperside markings has often been placed in *Castalius* (in which *Discolampa* was previously included), is quite unrelated to that genus” (when Stempffer wrote this he still included *Zintha* and *Tuxentius* in the Oriental *Castalius* Hübner, [1819], though clearly stating that they were not closely related).

*Azanisis* Kemal, 2004 must be considered a junior synonym of *Azanus* Moore, [1881] and should not be employed in any context (**syn. nov.**). No genus of African butterflies should be described without reference to Stempffer's important work. The important task of a final ordering of the generic structure of the African butterflies has progressed considerably during the past 50 years and is increasingly being assisted by molecular studies. There is still some way to go. The addition of new genus-level names without sound foundation will not further this process.

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