

Newsletter 17

December 2004

Newsletter of the African Arachnological Society



This is the newsletter of the African Arachnological Society (AFRAS). The aim of AFRAS is to foster interest in arachnids (non-Acari) of the African continent. enquiries and information should be sent to the editor.

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8TH AFRICAN COLLOQUIUM OF ARACHNOLOGY

The 8th Colloquium of the African Arachnological Society will be hosted by the National Museum, Bloemfontein and the University of the Free State, and will be held at the Maselspoort Resort, located 25 km outside Bloemfontein, from 30 January to 4 February 2005.

Please contact:

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For general information: <http://www.nasmus.co.za/ARACHNOL/news.htm>



The Maselspoort Resort

The Maselspoort Resort was selected for its proximity to the airport, the surrounding natural areas where spiders can be collected and the tranquil surroundings. For further details see: www.maselspoort.co.za.

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16TH INTERNATIONAL CONGRESS OF ARACHNOLOGY

The 16th International Congress Of Arachnology was held at Gent University, Gent Belgium between 2-7 August 2004.

A total of 251 participants from 49 countries attended the congress and presented a total of 182 papers and 122 posters. Everyone had a marvelous time. It was hot in Belgium and the litres of Belgium beers were very much enjoyed!!

For pictures, go to <http://allserv.rug.ac.be/%7ejpmaelfa/pictures.htm>

The next meeting will be in Brazil, 2007.



THE FOLLOWING PAPERS AND POSTERS ON AFRICAN ARACHNIDS WERE PRESENTED AT THE CONGRESS

BIRD T. & A. DIPPENAAR-SCHOEMAN. *Ammoxenus* (Araneae), specialized termite eaters and their phylogenetic relationships. [PAPER]

BIRKHOFFER K., S. SCHEU & J.R. HENSCHL. Territorial behaviour of *Leucorchestris arenicola* (Araneae: Sparassidae). [PAPER]

BIRKHOFFER K., S. SCHEU & J.R. HENSCHL. Does territorial behaviour in the desert-living spider *Leucorchestris arenicola* Lawrence (Araneae: Sparassidae) affect its spatial distribution? [POSTER]

BOSMANS, R. Report on a search for an impudent spider in North Africa. [PAPER]

BRAGUE-BOUREGBA N., A. BRAGUE & K. BENCHRIF. Ecology and systematics of some spiders in the Algerian steppes. [PAPER]

BRAGUE-BOUREGBA N., A. BRAGUE & K. BENCHRIF. Spiders of fixed string dunes in Algeria. [POSTER]

DIPPENAAR-SCHOEMAN A. & R. JOCQUÉ. The African Arachnida Databasis (AFRAD): an on-line expert information system. [PAPER]

DIPPENAAR-SCHOEMAN A., & C. HADDAD. Spider diversity of the Grassland Biome in South Africa (Arachnida: Araneae). [POSTER]

DIPPENAAR-SCHOEMAN A., C. HADDAD, A. VAN DEN BERG & S. V. D. M. LOUW. The spider communities on three orchard crops in South Africa (Arachnida: Araneae). [POSTER]

EL-HENNAWAY H. Arachnida in Mediterranean protected areas of Egypt. [PAPER]

EL-HENNAWAY H. White widow in Jordan and Egypt. [POSTER]

HARVEY M.S. What does the phylogeny of the Old World Schizomida tell us about the Malagasy schizomid fauna? [PAPER]

HUBER B.A. Cleaning up a wastebasket: the diversity of African 'Spermophora' spiders (Araneae: Pholcidae). [POSTER]

JÄGER P. & D. KUNZ. Morphological evidence for the monophyly of the re-established subfamily Eusparassinae Järvi 1912 (Arachnida: Araneae: Sparassidae). [POSTER]

KHERBOUCHE-ABROUS O. & R. BOSMANS. The species of the *Zodarion algiricum* group in North Africa. [PAPER]

KHERBOUCHE-ABROUS O., BELADJAL, J-P. MAELFAIT & R. JOCQUÉ. Phenology of three Dysderidae species in the Tala-Guilef region (National Park of Djurdjura, Algeria). [PAPER]

KUNZ D. & P. JÄGER. Description of male and female of *Arandisa* Lawrence and comparison with *Leucorchestris* Lawrence referring to morphological characters (Araneae: Sparassidae). [POSTER]

LEROY A. & J. LEROY. Marble spiders: burrows of *Ancylotrypa* sp. protected by a 'marble'. [POSTER]

LOURENCO W.R. Diversity and endemism in Malagasy scorpions. [PAPER]

MUKHERJEE A., R. NAVARO, L. UNDERHILL & Y. LUBIN. First record of spider diversity and abundance: Robben Island, South Africa. [PAPER]

NELSON X. Blood-lust of an East African jumping spider, *Evarcha culicivora*. [PAPER]

NØRGAARD T., J.R. HENSCHL & R. WEHNER. Are local cues involved in the night-time navigation of the wandering spider *Leucorchestris arenicola* (Sparassidae)? [PAPER]

PRENDINI L. Threats facing southern Africa's unique scorpion fauna. [POSTER]

SALLAM G.M.E. Life cycle of the theridiid spider *Steatoda paykulliana* (Walckenaer, 1805) in Egypt. [PAPER]

SALMON M. & Y. LUBIN. Allomaternal care and reproductive success in the social *Stegodyphus dumicola* (Eresidae). [PAPER]

SCHMIDT J.B. A taxonomical revision and phylogenetic analysis of the orb weaver spider genus *Acusilas* Simon, 1895 (Araneae, Araneidae). [PAPER]

SCHNEIDER J.M. & L. FROMHAGE. Male mating tactics in a cannibalistic spider, *Nephila fenestrata*. [PAPER]

TOULOUN O. & A. BOUMEZZOUGH. Distribution and ecology of scorpion communities in the South Western Morocco. [PAPER]

WARUI C.M., M.H. VILLET, T.P. YOUNG & R. JOCQUÉ. Influence of grazing by large mammals on the spider community of a Kenyan Savanna. [PAPER]

WILLEMS J., S. BOSTEELS, L. MOERMAN & F. VERDONCK. Signal transduction pathways induced by Parabutopirin from *Parabuthus schlechteri* in granulocytic cells. [POSTER]



CONGRATULATIONS TO:

Maira Fitzpatrick of the National Museum of Zimbabwe in obtaining her PhD degree. She studied some of the Zelotinae (Gnaphosidae) of the Afrotropical Region.

Stefan Foord of the University of Venda who completed his PhD at the University of Pretoria on the systematics of the Hersiliidae of the Afrotropical Region.

Charles Haddad with his appointment as junior lecturer at the University of the Free State.

Ansie Dippenaar-Schoeman with her election as the President of the International Society of Arachnology for 2004-2007.

NEWS SNIPPETS

According to **Charles Griswold**, the California Academy of Sciences has successfully moved all collections and staff to a new downtown location. Collections are once again available for loan and study. Our new postal address is: Entomology, California Academy of Sciences, 875 Howard Street, San Francisco, CA 94103-3009 USA. Their new fax number is: 415-321-8640. The e-mail addresses remain the same [see institutional news below].

Ian Engelbrecht, one of our scorpions experts in South Africa, pointed the following scorpion name change out to us: *Ischnuridae*, which includes the rock scorpions *Hadogenes* and *Opisthacanthus* and *Cheloctonus* in Southern Africa has changed to *Liochelidae*.

Stamps:

The new standard stamp series of South Africa for the next two years is spiders. It is really a beautiful series with information on each spider on the back. It is a wonderful opportunity to market spider to the public and our South African spiders to the world. However, that was the good news.

The bad news is that at present there is a dispute on between the artist who illustrated the stamps and members of the spider club about copyright. An interdict at this stage prevents the distribution of the stamps. We hope the problem will soon be resolved because it will be a tremendous lost for spiders if the stamps are destroyed.

WELCOME TO NEW MEMBERS

Lynda Beladjal, Ghent University, Ecology, K.L. Ledeganckstraat 35, B-9000, Ghent-Belgium.

Richard Gallon, 23A Roumania Crescent, LL30 1UP, United Kingdom.

Ourida Kherbouche-Abrous, Laboratoire Ecologie Animal, Faulté de Biologie, Université des Sciences et Technologie, Houari Boumedienne, BP Elalia, Babezzonar, Algeria.

Mandisa Pride Mgobozi, Zoology Dept., University of Transkei, Private Bag X1, Umtata, 5117.

Lucian K. Ross, 6303 Tarnow, Detroit, MI 48210-1558, USA.

Dr Michael J. Somers, Dept of Zoology, University of the Transkei, 5117 UNITRA.

SPECIMENS WANTED

- **Jiří Král** of the Laboratory of Arachnid Cytogenetics, at the Charles University in Prague, writes:
 - Our research deals with cytogenetics and cytotaxonomy of arachnids, especially spiders. During last three years, we have turned attention also to the comparative karyology and karyotype evolution of primitive spiders and other arachnid orders.
 - At present, our laboratory is concentrated on the chromosome evolution of basal araneomorphs, namely haplogynous spiders and the family Eresidae. Concerning haplogynes, we studied karyotypes of approx. 30 haplogynes belonging to 10 families, namely Hypochilidae, Austrochilidae, Filistatidae, Dysderidae, Segestriidae, Oonopidae, Pholcidae, Leptonetidae, Loxoscelidae, and Scytodidae. We would like to include representatives of all haplogynous families into study. Obtained data enable to reconstruct karyotype evolution of this interesting group of spiders. However, it is very difficult to obtain representatives of some families for us (especially tropical and subtropical groups). We would like to describe also the karyotype of representative of the family Drymusidae. Unfortunately, only alive specimens are suitable for chromosome analysis. In spiders, optimum stage for chromosome analysis is subadult male. Testes of this stage contain numerous spermatogonial mitoses as well as various stages of meiotic division. However, we will be very grateful for any specimen because this material is very rare for us.
 - We should be very thankful also for caponiids, oonopids, and South African eresids. Concerning eresids, we are interested especially in representatives of the genera *Gandanameno*, *Seothyra*, and *Paradonea*. Chromosomes of these genera are unknown.
 - Contact him at spider@natur.cuni.cz

OBITUARY

Les Oates passed away on in the beginning of 2004. Les was always a keen photographer but after his retirement he got involved with the "spider ladies" of the ARC and became one of the best spider photographers of South African arachnids. Les photographed arachnids for the ARC-Spider Research Centre on request. With the help of several people, especially Marie de Jager, we were able to built up a very impressive photo database on South African spiders (ARC-Arachnida Photo Library).

Les won several awards with his photography and he was especially proud of the photo of a salticid *Hyllus brevitarsi* with which he won a first prize at an AGFA competition. An image of this spider by Les will soon appear in print in a publication of Wanda Wesolowska. One of his images of *Parabuthus granulatus* was also used on a journal cover overseas. Most of his photographs have been scanned and the images are freely available on www.ecoport.org, as well as the ARC website at www.arc-ppri.agric.za.

Through his very valuable contribution he enabled us to give presentations, road shows, produce CD-ROM's, books and wall posters and write popular articles. It was a very rewarding relationship for us all and we know Les Oates's name will live



The salticid *Hyllus brevitarsi* with which Les Oates won a first prize at an AGFA competition.

Institutional News

BELGIUM

Rudy Jocqué of the Koninklijk Museum voor Midden Afrika is busy with **Ansie Dippenaar-Schoeman** to compile a "Guide to all the spider families of the world." The book will contain basic information on each family with line drawings and colour photographs, were available. They hope to complete this project end of 2005.

Rudy also obtained funding for a four-year project to study canopy spiders in Central and West Africa. **Domir De Backer** a student at the Royal Belgian Institute of Natural Sciences will assist him to carry out this study. Read more about Rudy's involvement in the rest of Africa.

BURUNDI

Benoît Nzigidahera of Burundi is carrying out a study of forest spiders in Burundi and will attempt to start a PhD in Belgium supervised by Rudy Jocqué.

CALIFORNIA

Charles Griswold, Schlinger Curator of Arachnida at the California Academy of Sciences, is revising the Phyxelididae of Madagascar. There are approximately 12 species in two genera. Each genus has its closest relative in tropical Africa. He is also continuing a revision of the Malagasy Zorocratidae, which has about 60 species, most of them new. cgriswold@calacademy.org

Darrell Ubick, Senior Curatorial Assistant, is beginning a monograph of Oonopidae of Madagascar. No species are yet described from this island. So far, Darrell has recognized about 70 new species. dubick@calacademy.org

Diana Silva, Schlinger Chair of Arachnology Postdoc, is studying the Ctenidae and Sparassidae of Madagascar. There are approximately 100 new Ctenidae and more than 100 new Sparassidae. She has just completed a revision of the sparassid genus *Chrosioderma* and revisions of the ctenids *Viridasius*, *Vulsor* and *Tsingy* are on the way. dsilva@calacademy.org

Hannah Wood is a M.Sc. student in graduate training at San Francisco State University. She is revising the Malagasy Arachaeidae, with a phylogeny of the gracilicollis group. She has discovered several new species.

Daniela Andriamalala, who is from Madagascar, is a new M.Sc. student at San Francisco State University. She is studying Madagascar Salticidae, and is revising the genus *Padilla* and its relatives.

Please note the web publication on Madagascar spiders. "SPIDERS RECORDED FROM MADAGASCAR" (in progress, version 2004), by V. D. Roth, D. Silva Dávila, D. Ubick and C.E. Griswold http://www.calacademy.org/research/entomology/Entomology_Resources/Faunal_Projects/madagascar_spiders/index.htm. The above website hosts digitized copies of the original descriptions of species of 36 families of Madagascar spiders. Other literature will be posted as copyright approvals are received.

The CAS continues to prepare arachnids from the Madagascar survey. We have scores of thousands of newly-prepared specimens. Please write for loan material of interest to Charles Griswold. Staff cuts have slowed us down, but we try to get all loans out eventually.
California Academy of Sciences
875 Howard Street, San Francisco
CA 94103-3009 USA

CONGO

Jean-Louis Juakaly (University of Kisangani, RD Congo) has finished his fieldwork on the spider fauna of Masako forest in the vicinity of Kisangani and will visit Rudy Jocqué at Tervuren for a third time to complete the analysis of his data.

ETHIOPIA

Negusu Aklilu (University of Ethiopia) is finishing his Master's thesis on the spider fauna of coffee forest in Ethiopia. He is supervised by Rudy Jocqué.

GERMANY

Peter Jäger and **Dirk Kunz** of the Forschungsinstitut und Naturmuseum Senckenberg are studying the Sparassidae of Africa starting in the south. They have compiled an illustrated key to the genera that are in press. Dirk received funding for this project and visited South Africa earlier this year for 3 months. During this period he visited all the larger collections and collected his first live specimens. The second part of his trip starts on 1 December 2004 and he plans to visit areas in Namibia as well

KENYA

ICIPE

Charles Midega of ICIPE is busy with a series of studies conducted in western Kenya and Potchefstroom, South Africa to evaluate species diversity and abundance response levels of spiders to Bt-maize and a habitat management system ('push-pull' system) developed by the International Centre of Insect Physiology and Ecology (ICIPE) and its partners (www.push-pull.net).

In this system maize is intercropped with a leguminous non-host plant, *Desmodium uncinatum* Jacq., which serves to repel stemborer moths away from the main crop ('push'). An attractive host plant, Napier grass (*Pennisetum purpureum* Schumacher) is planted as a border/perimeter crop around the plot and serves to attract the repelled moths towards it ('pull'). Studies have shown that the moth is effectively kept away from the maize and crop yields are enhanced.

The current studies were aimed at assessing its impact on ground-dwelling arthropod abundance and diversity with spiders as the indicator group. Principal treatments comprised of maize monocrops and 'push-pull' systems in both countries. In Kenya non-Bt maize was used while a combination of both Bt-maize and non-Bt were used in South Africa. Spiders were sampled using a combination of pitfall traps and soil monoliths.

A total of 2175 spiders representing 70 species in 18 families were recovered in Kenya while 658 spiders representing 49 species in 12 families were recovered in South Africa. Analyses comprising of species richness, evenness, overall abundance (total spider counts) and dominance revealed that the differences in species richness between the maize monocrop and 'push-pull' plots were not significant but the abundance measures were significantly higher in the latter in both countries. Bt-maize did not have any impact on spider diversity, abundance and dominance but incorporation of 'push-pull' technology in Bt-maize system significantly enhanced spider abundance.

Institutional News

KENYA (CONTINUE)

These results imply that besides already published benefits of the 'push-pull' system, farmers could reap additional benefits in these systems resulting from further control of borers by the predatory spiders. And because these organisms also play an integral part in above- and below-ground food webs they can impact on litter decomposition and nutrient dynamics within the soil/litter interface. (C. Midega (ICIPE, Kenya), J. van den Berg (North-West University, Potchefstroom Campus, South Africa), A. Dippenaar-Schoeman (ARC, South Africa).) E-mail: cmidega@yahoo.com

NATIONAL MUSEUMS

Charles Warui of the National Museums of Kenya (NMK), Nairobi, is correcting his PhD thesis that he received in April 2004. He hopefully will graduate in April 2005 at Rhodes University in Grahamstown. His thesis was on "Impacts of wildlife and cattle grazing on Biodiversity in a savanna ecosystem. A case study of spiders (Araneae) in Laikipia, central Kenya". Some other publications on this savanna work are being processed (see new publications). The following Ms is about to be submitted to *Journal of Arachnology*:

WARUI, C. M., VILLET, M. H. & YOUNG, T. P. & JOCQUÉ, R. Influence of grazing by large mammals on the spider community of a Kenyan savanna.

Meanwhile he continues with setting up a spider database at the department of invertebrate Zoology of NMK and the process is picking up slowly. He is currently also developing proposals to seek funds to survey spider diversity in the main mountainous forests ecosystems especially Mt. Kenya, Taita Hills (as part of the Eastern Arc mountains) and Mt. Elgon. cmwarui@yahoo.com

LESOTHO

In recent years Lesotho has begun to strengthen conservation efforts of both vertebrates and invertebrates. This includes projects on biological diversity in the Maluti Mountains as part of the Lesotho Highlands Water Scheme, the establishment of a Trans-frontier park between Lesotho and South Africa along its eastern border, and the present project, which involves the conservation of mountain biodiversity in southern Lesotho.

Despite this increased effort to acquire knowledge of the diversity of the country's fauna, no publications exist on the invertebrate biodiversity. This shortage of knowledge is something of a stumbling block in determining which species may be of conservation importance. **Charles Haddad** prepared a checklist of the arachnids sampled during a collecting trip in southern Lesotho in 2004. Arachnids were collected at selected sites in southern Lesotho by five methods, primarily rock turning and sweep netting. A total of 159 morpho-species representing four orders of arachnids were collected in this study. The greatest diversity was found among the spiders (Araneae, 152 morphospecies in 34 families), harvestmen (Opiliones, five morphospecies, two families), false scorpions (Pseudoscorpiones, one species), and true scorpions (Scorpiones, one species). The most diverse family was the Salticidae, with 26 species.

Ansie Dippenaar-Schoeman compiled from the AFRAD database a list of 58 species that have previously been recorded from Lesotho. To this information will be added spiders collected by Dr. **Grzegorz Kopij** while he worked in Lesotho. He is presently stationed at the Agricultural University of Wroclaw. This material has been sorted into morpho-species and species identifications are presently being done by specialists. We hope to publish the results of this joint effort in 2005.

NAMIBIA

NATIONAL MUSEUM

Tharina Bird at the National Museum of Namibia (NMZ) is busy to mentor and train new arachnologists. The Edu-Ventures programme of the museum, initiated in 2003, continued to be a real success. This year these collecting expeditions were organized to the drier and highly under collected northern side of the Brandberg mountain, as well as to the Dikkewillem and Kirchberg mountains (two inselbergs in the desert in the Luderitz area).

The children that participated in this educational programme are now (hopefully) fired up ambassadors for the environment, while numerous specimens from remote areas, the latter often totally lacking any data, have been added to the museum collections.

As a direct result of this programme, two grade 11 students also did a study of people's attitudes towards spiders, a project that eventually earned them a bronze medal in the International Science EXPO held in South Africa.

Surveys are still high priority at the NMZ. The survey of the imposing Gamsberg Mountain is still ongoing, as is the survey of the Twyfontein rock engraving site in preparation for the application to have this site declared a World Heritage Site. Various fieldtrips have been undertaken, the most extensive being the scorpion collecting trip with **Lorenzo Prendini** in the beginning of the year to the Kaokoland, and another trip recently to the Sperrgebiet (the restricted entry area on the west coast of Namibia). A specimen collected from approximately the same area a year ago, a tiny male spider, was identified by Rudy Jocque as belonging to the family Synapridae, which is a new family record for the afrotropical region.

On the research field, the project on the evolution of inbreeding in social systems (looking at *Stegodyphus domicola*), with **Trine Bilde** as leader of the project, is nearing an end in Namibia, and so is the project comparing the long-term live trap data from Gobabeb with data collected from preservative trapping. Concerning student projects, one particularly interesting project compared distribution of webs in bush encroached and "cleared-for rehabilitation" areas, and was done by a student from the Technical College.

As part of the Namibian Arachnid Atlas (NAA) project, nearly all specimens in the collection are now databased and the (slow) process of getting all these specimens geo-referenced is ongoing.

One particular highlight to the Arachnology department is the appointment in this department of **Mr. Benson Muramba** (incidentally, he participated in the first Edu-Ventures trip). Although newly appointed, he has helped in the Arachnology department on a part-time basis since February this year. Benson wants to study zoology, focussing on arachnids, and had a full-page article about him (and spiders) in *The Namibian*, one of the

GOBABEB TRAINING & RESEARCH CENTRE, NAMIBIA

Long-term studies of populations of desert spiders in the Namib continue into the 16th year. That is twice the estimated lifespan of the corolla spider, *Ariadna crf masculina*, one of the spiders being monitored. The others are the spoor spider *Seothyra henscheli*, and the dancing white-lady spider, *Leucorchestris arenicola*. These spiders have quite different life histories and ecology, appropriate for comparison.

Institutional News

NAMIBIA (CONTINUE)

For his doctorate **Thomas Nørgaard** from the University of Zürich is observing the long-distance navigation and orientation of *L. arenicola*, testing several hypotheses of how these spiders find their way home across tens of meters of bare dune sand on dark nights. **Andrew Murray** and **Paul Brehem** of the BBC joined Thomas' research on *L. arenicola*, and revealed glimpses of how these spiders communicate over distances of many metres by sand-drumming.

Tharina Bird from the National Museum of Namibia is pitfall trapping solifugids, near Gobabeb and comparing it with some of her other exotic study sites, including the top of the Gamsberg mountain (see Tharina's report).

Trine Bilde from the University of Århus in Denmark and **Yael Lubin** from Israel and several students and assistants have been investigating the evolution of inbreeding in social spiders *Stegodyphus dumicola* in Namibia under the auspices of the Gobabeb Training and Research Centre.

POLAND

Wanda Wesolowska from the Zoological Institute, Warclaw University in Wroclaw, Poland is very busy to solve the Salticidae problems of Africa. At the moment she is working on the following projects:

- A survey of the salticids of Ethiopia.
- Research on salticids in a suburban garden in Harare with Meg Cummings.
- Redescription of a few African *Hyllus* species.
- Salticids from reserves in Africa: Ndumu Nature Reserve in South Africa with Charles Haddad and Sengwa National Park in Zimbabwe with Meg Cumming.

Wanda also mentioned that she has "extensive plans" in relation to the African jumping spiders – very good news (ed.) See Wanda's latest publications as listed in the publication list.

SWAZILAND

Dr A. Monadjem of the University of Swaziland surveyed the spiders of Swaziland. With **Ansie Dippenaar-Schoeman** they hope to produce the first checklist of spiders from Swaziland in 2005. From the AFRAD database 19 species have previously been recorded from Swaziland. Ansie has identified the spiders collected into morpho-species and the families are presently being identified by specialists.

YEMEN

Tony van Harten left Yemen and is presently in Saudi Arabia. However, he still continues to get the papers published on specimens collected by him during his stay in Yemen. For recent papers see new publications on Hersiliidae, Lycosidae and Thomisidae.

UNITED KINGDOM

Richard Gallon's research interest is the taxonomy of Africa's theraphosid spiders (baboon spiders). He is currently engaged in the revision of a number of genera including *Harpactirella*, *Harpactira* and *Heterothele*. Another issue he is tackling is the paraphyletic genus *Phoneyusa*, in an attempt to resolve the taxonomy of this problematic group.

He is always interested in examining African theraphosid specimens, so please contact him if you feel he can help. He is particularly keen to see specimens of *Harpactirella*, *Harpactira* and *Heterothele*, since he is concentrating on these genera at the moment. See his list of publications under "new publications"

Richard Gallon, 23A Roumania Crescent, Llandudno, North Wales, LL30 1UP, United Kingdom. E-mail: postmaster@zezz.

ZIMBABWE

Meg Cummings of Harare put out a plea in the 2003 Newsletter for help with the identifications of the spiders collected in her garden over the past six years. From England, **Tony Russell-Smith**, who has worked on spider diversity in Kenya, Tanzania, Botswana and Namibia, gallantly offered his services. Since the deluge hit him he may be regretting his decision but he assures her that he enjoys studying African spiders. And **Ansie Dippenaar-Schoeman** kindly agreed to make sense of the thomisids and mygalomorphs. Deep thanks to them both, and also to other taxonomists who have looked at other families. The preliminary results will be presented at the AFRAS Colloquium in Bloemfontein. As a result of this work she finds herself now with a developing interest in urban wildlife in general.

Continuing with last year's 'Atypid-on-the-stoep' tale one of the mygalomorphs sent to Ansie, and which she has plucked out of mid-air as it ballooned past in February 2000 turned out to be a tiny immature *Calommata simoni*. This is the first record of them ballooning and also suggests they are more common than generally supposed.

With **Wanda Wesolowska** she continued having fun with Salticids, both from the garden and from around Zimbabwe (whenever the chance arises) and have published two papers this year. A third joint paper, with her husband, remains in the limbo of *Cimbebasia*.

Dr Moira FitzPatrick has been appointed as the curator of the Arachnida Department after Amos Vengère left the National Museum of Zimbabwe. In between she prepares papers based on her PhD study. Work this year has been concentrating on the Matobo Hills, a world heritage site, which has diverse habitat types from rocky outcrops, vleis, riverine woodland, dry woodland, forest patches, mopane woodland, to name a few. She is doing a weekly monitoring program in four habitat which is generating some very interesting data, and new species etc. It is hoped that this program will continue for at least two years. She is also in the process of doing a taxonomic revision of Purcell's and Tucker's *Setaphis* species. These species of mutilid ant mimics will be given a new generic name. This should be completed before June 2005. Computerization of the collections has started and will continue in earnest next year, and hopefully won't take too long to complete.

Institutional News

SMITHSONIAN INSTITUTE, WASHINGTON

Matjaž Kuntner, as part of his PhD, critically reviewed the biology, systematics and evolution of the tetragnathid spider subfamily Nephilinae Simon in his dissertation, defended in November 2004 at the George Washington University (GW), USA. The research, sponsored by an US NSF PEET (Partnership for Enhancing Expertise in Taxonomy) grant to G. Hormiga and J. Coddington, was carried out at GW, at the Smithsonian Institution and various field locations worldwide.

The group Nephilinae previously contained eight genera with 55 species and 28 subspecies, for which more than 200 available species level names exist. His study hypothesizes the monophyly of the four genera, *Nephila*, *Nephilengys*, *Herennia* and *Clitaetra*, and classifies them in the family Nephilidae (new rank). He described, diagnosed and illustrated all species of these genera and summarized their biology. Six species of the African and Oriental genus *Clitaetra* are recognized and described with a new species from South Africa. The valid species of the pantropical genus *Nephilengys* are reduced to four. The Australasian genus *Herennia* contains two previously known and nine new species, mainly narrow island endemics. Of the 145 available names for the pantropical genus *Nephila* only sixteen valid species remain.

In the phylogenetic chapter he treated 61 terminal taxa (32 nephilid species and 29 outgroups representing nine families) and provided 231 hypotheses of morphological and behavioral homologies. The cladistic analysis unequivocally established nephilids as sister to all remaining araneoids, disputing previous hypotheses of tetragnathid or araneid affiliations. He proposed to transfer to Araneidae the genera *Phonognatha*, *Deliochus*, *Singafrotya* and *Perilla*, all formerly nephilines. Finally, he discussed the evolution of selected morphological and behavioral traits in the light of the new araneoid phylogeny.

Of particular interest to biologists is the genus *Nephila*. Americas only have two species although several more are known from Dominican amber. Australasia has five, but Africa is the richest continent with nine *Nephila* species. Most of them are widespread and are now known from both sexes, but two apparently rare or even extinct species are described from a single sex, one from South Africa (and Madagascar), and one from Zanzibar. His revision, when published, along with an online interactive key (in preparation) will facilitate species identifications. Email: kuntner@gwu.edu

Ed: Congratulations!



S.A.MUSEUM SUMMER SCHOOL:

The Private Lives of Spiders and their Kin

Arachnids, the oldest group of terrestrial animals, evolved some 400 million years ago. A diverse class with 11 orders and roughly 93,000 species worldwide. Arachnids have evolved into many different forms that inhabit every ecological niche from intertidal zones to the tops of the highest mountains. This slide presentation will focus on the South African spider fauna and other common arachnid orders. Live spiders will be on view.

Date: Wednesday, 2nd of February at 19h00 - 21h00

Place: Iziko, South African Natural History Museum.

Spider night Walk in Newlands Forest to observe these fascinating creatures. An easy walk, but a good torch with fresh batteries is a must.

Date: Saturday, 5th of February at 20h00 - 22h00.

DID YOU KNOW

Each colloquium and congress in South Africa usually results in the discovery of new species, e.g. Cape Town Colloquium in 1994: A new Theridiidae, *Achaeearanea globispira* Henschel & Jocqué, was described.

At the Badplaas congress a new Pholcidae was found, namely *Quamtana embuleni* Huber, 2003.

Can't wait to see what Maselspoort is going to produce!

Institutional News

SOUTH AFRICA

ARC-PPRI SPIDER RESEARCH CENTRE

The ARC team consists of **Ansie Dippenaar-Schoeman, Elizabeth Kassimatis, Annette van den Berg, Connie Anderson en Jonas Nkwana.**

TAXONOMIC RESEARCH

As part of an identification manual series on the spiders of Southern Africa a book on the Thomisidae is in preparation but it is going very slowly. The first paper on the Thomisidae of Yemen is still under review. The revision of *Felsina* will hopefully be completed next year.

SPIDER DATABASES

At the ARC-Spider Research Centre we are busy to upgrade our present access Arachnida database to a MYSQL database with PHP web-programming language. In the process we are integrating it with the African Arachnida Database (AFRAD) and the South African National Survey of Arachnida (SANSA) database.

Hopefully soon we will have a database on all the known species of Africa with information on their distinguishing characters, distribution (including information from both taxonomic and ecological papers) and images. This information will be made available on the web.

IDENTIFICATION SERVICES

A total of 6550 spiders were sorted and identified for 35 clients. The clients include: universities, museums, nature conservation agencies, National Department of Agriculture, other ARC Institutes and the public. All of this information are incorporated into the South African National Survey of Arachnida.

ENVIRONMENT IMPACT ASSESSMENTS

The Quelea EIA survey on the Springbok Flats has been completed and the results will be available soon.

A Tsetse EIA survey is presently underway in the St Lucia Wetlands in KwaZulu-Natal. Some very interesting specimens have been sampled. The survey stop in April 2005.

We are involved in several surveys in Bt cotton and Bt maize with the University of Pretoria, University of North West and ARC-PPRI.

ARACHNIDA IN AGRO-ECOSYSTEMS

The paper on spiders in avocado orchards has been submitted for publication. A total of 3715 specimens representing 26 families, 68 genera and 90 species were collected.

A review article on spiders in citrus orchards in South Africa is in preparation. Thirty-five families, represented by 134 genera and 197 species have been recorded from citrus so far.

A complete checklist of spiders in agro-ecosystems in South Africa is being prepared.

ARC-PPRI SPIDER RESEARCH CENTRE (CONTINUE)

SPIDERS FROM FLORAL BIOMES

A booklet with distribution maps will be prepared for species in the different floral biomes. Progress so far:

From the SANSA database we have compiled list of 49 families represented by 209 genera and 400 species that have so far been recorded from the GRASS BIOME.

Several projects are presently underway in the SAVANNA BIOME and a total of 53 families represented by 282 genera and 594 species have been recorded.

Based on new and old projects in the FOREST BIOME a total of 47 families represented by about 312 species have been recorded.

SPIDERS IN CONSERVED AREAS

The paper on the Swartberg Nature Reserve will appear in the next Koedoe. An updated list of the spiders of the Mountain Zebra National Park is underway.

We have now a registered project for the Arid SANparks. We hope to produce species list for all.

"ARC-SPIDER EDUCARE PROJECT"

For years now, the *ARC-Spider-Educare project* has been developed to reach-and-teach thousands of children and adults at nursery-, primary- secondary schools, tertiary institutions, science festivals, science clubs, Nature Conservation bodies, farmers, Woman's Agricultural Union, Agricultural Writer's Union, Rotary club, museums, adventure clubs, old age homes, garden clubs to name but a few.

TO SUMMARIZE THE 2004 ACTIVITIES:

TALKS

School talks: 21 schools reaching 1270 children
Societies: 7, reaching 500 people.

LECTURES

University of Pretoria: 6 lectures (2nd year Zoology students and 5th year medical students). Invited speakers at SASOL SCI FEST in Grahamstown and the launch of the new stamp series.

WORKSHOP/IDENTIFICATION COURSES

Gauteng Nature Conservation; students of the University of the North; NFI: Transvaal Museum (workshop)

TV AND RADIO

During 2004 we were involved in the following programmes: *Tuinpaleis* on KykNet, *Semaka 50/50* on SABC2, SABAfrika, *Morning Live* on SABC2 and Agri-TV on TV2.

We also participate in radio talk shows and during 2004 ten talks on spiders were broadcast.

To read more – visit our website at:

<http://www.arc.agric.za/institutes/ppri/main/divisions/biosysdiv/arachnida.htm>

Institutional News

GAUTENG NATURE CONSERVATION

Marianne Forsyth is leading the Gauteng Biodiversity GAP project of the Gauteng Directorate of Nature Conservation. The main aim of this project is to gather baseline information on the present status of the fauna of Gauteng. This data will be used to produce a GIS-based database, to be able to make decisions on how to successfully conserve the biodiversity in Gauteng. The Arachnida part of this project consist of four activities:

- to incorporate all available records from the literature including both taxonomic revisions, as well as ecological surveys [99% completed].
- to incorporate unidentified specimens housed in the National Collection of Arachnida (NCA) and the NFI –Transvaal Museum are identified [95% completed]
- to add data recorded during surveys presently undertaken by the Gauteng Gap team. They are busy with surveys throughout Gauteng and all the spiders that have been collected are identified and voucher specimens are housed in the National Collection of Arachnida (NCA). At present the emphasis is on scorpions and the Mygalomorphae.
- to add value to the data in the form of scientific publications, development of keys, books, wall charts and CD's.

Results so far:

From our present knowledge we were able to compile the first check lists for six of the seven arachnid orders recorded from Gauteng (mites were at this stage excluded). In total this represent 60 arachnid families, 223 genera and 390 species divided as follows: Amblypygi (1 sp.), Araneae (358 spp.), Opiliones (2 spp.), Pseudoscorpiones (10 spp.), Scorpiones (10 spp) and Solifugae (9 spp.).

The 5-year plan is:

- to publish the first arachnid species lists of Gauteng with GIS plotting and information on diversity within the conserved areas, agro-ecosystems and urban development areas. This information will be published as part of the ARC-PPRI catalogue series and the manuscript is already in an advance stage.
- to produce a field guide to the arachnids of Gauteng with a photo of each species.
- to produce wall charts of the main groups for educational purposes.
- to publish keys and new information (including new species) of the Mygalomorphae of Gauteng.
- to gather data to enable us to submit proposals for listing of red data species.

The team consists of **Marianne**, **Ian Engelbrecht**, **Martin Paulsen**, **Peter Roos** and his son **Keith** and **Peter Hawkes**.

NATIONAL MUSEUM, BLOEMFONTEIN

Leon Lotz's research deals with:

Revisions of the Afrotropical species of the genera *Cheiracanthium* and *Cheiramiona* in the Afrotropical Region and Archaeidae and Sicariidae.

His biodiversity projects form part of the South African National Survey of Arachnida and include: surveys of scorpions of the Free State; a long term project for the spiders is in the planning phase.

With **Charles Haddad** he published a study on the " Diversity and Ecology of Spiders (Arachnida: Araneae) of the Dorsai Plateau, Northern Pakistan. *Pakistan Journal of Sciences* 7(10): 1689-1694".

He is busy updating the museum's webpage (<http://www.nasmus.co.za>) and organizing the 8th African Arachnological Colloquium.

NFI: TRANSVAAL MUSEUM

At the Arachnology Department **Klaas Manamela** is involved in biodiversity surveys at the Ezemvelo Nature Reserve near Bronkhorstspuit, the Tswaing Crater near Pretoria and Tswalu Nature Reserve in the Northern Cape. In July Klaas presented a workshop at the museum on spiders with the assistance of Ansie.

SOUTH AFRICAN MUSEUM, CAPE TOWN

Norman Larsen, honorary curator of the SAM, is still doing ecological work on *Avellopsis*. He is supplying the following researchers with material, for example, Jeremy Miller, Department of Entomology Smithsonian Institution with specimens of *Avellopsis capensis* for DNA studies and Dirk Kunz with information and specimens on sparassids of which one specimen collected recently in the Kalahari appears to be a new genus.

The same for *Caerostris*. **Matjaz Kuntner**, Dept. of Entomology, Smithsonian Institution plans to revise the genus and Norman also collected a new species of *Meta* that Matjaz Kuntner will describe next year.

Norman has also collected "*Loxosceles valida*" (probably *Drymusa capensis*) for Jiří Král of the Charles University, Czech Republic, for chromosome analysis.

For Otto Krause he will be collecting some tiny relatives of prehistoric Diplopoda (genus *Polyxenus*).

Institutional News

UNIVERSITY FREE STATE

Charles Haddad continues his revisionary studies of Afrotropical Corinnidae with the Castianeirinae genera *Copa* and *Cambalida*. He is also in the process of describing a new tracheline genus, with three new species. He is also involved in surveys in Lesotho. See Lesotho for news on the surveys and checklists of Lesotho.

Surveys continue at the Ndumo Game Reserve in northern KwaZulu-Natal, with a new project initiated earlier this to study the heterogeneity of the spider faunas associated with the bark of fever trees at various sites in the reserve.

Another biodiversity survey was initiated in March 2004, and deals with the spiders of the De Hoop Nature Reserve in the South-Western Cape.

UNIVERSITY NATAL

Dr Michelle Hamer is continuing with a number of invertebrate projects as part of the Inland Invertebrate Initiative. This include Earthwatch-funded projects at Mkhuze/Phinda reserves; impact of burning on grasslands in the Drakensberg and invertebrate diversity in indigenous forests of the Limpopo Province.

The latter project is undertaken by **Johanna Horn** as part of her PhD degree. Web building and ground wandering spiders were sampled over a one-year period in 11 forests, including six from the east-central Soutpansberg and five from the Northern Drakensberg, using pitfall traps and active searching of transects. The sampled forests comprise two distinct forest subtypes, Moist Evergreen and Semi-deciduous Forest. A total of 704 individuals from 25 families, 53 genera and 65 species were recorded. A publication on her study will appear soon. She will also present her work at the colloquium in January 2005.

UNIVERSITY OF THE NORTH

Under supervision of **Dr Susan Dippenaar** of the University of the North and the help of Ansie, two honors students are involved in spider research projects. We really hope this is only the start.

Thembile Khoza visited Marion Island where she undertook a survey over a period of four weeks (11 April – 30 May 2004). She is presently writing up her report for her Honours degree and will present her work at the forthcoming colloquium at Maselspoort.

Mokgadi Modiba did a survey of the spider of Sovenga Hill on the campus of the University of the North. This was the first survey for the area and will also form part of SANSA. The study took place during April and May 2004. Six sites were selected on each of the southern, eastern, northern and western slopes. Sampling was conducted twice a week during the morning. Spiders were caught using five different methods, namely tree beating, sweep netting, active searching, pitfall traps and leaf litter. Representatives of 29 families were sampled. She will also present her work at the next colloquium.

WESTERN CAPE NATURE CONSERVATION

Surveys at the Swartberg Nature Reserve by Zanie van der Walt and Kamanassie Nature Reserve continues. The first checklist of the spiders of SNR will appear mid 2005 in *Koedoe*.

UNIVERSITY CAPE TOWN

Aeshita Mukherjee, a postdoc at the University with the help of **René Navaro** collected spiders from Robben Island during 2003-2004. Robben Island is 507ha in extent and the largest in a string of islands, which lies along the south-western coast of Africa. The aim of this study is to: make an inventory of the spider species; to compare species found with species on the mainland and to determine seasonal variation. **Aeshita** left South Africa but René is continuing with the research. Ed: Watch this space next year for more information.

UNIVERSITY PRETORIA

Dr Berndt van Rensburg (Dept. Zoology/Entomology) is involved with Stefan Foord in a Thuthuka project – to determine the diversity of the spiders of the Savanna Biome. He is also planning to publish the results of the Tembe Elephant Park survey with Charles and Ansie. He is starting his research on spiders

Magda Mellet, previously from the University and **At Schoeman** are busy with a survey of invertebrates from Bt cotton. The spider component was identified by Ansie.

Jan Myburgh, with members of the Gauteng Nature Conservation, is continuing his survey on spiders in caves. He and Ansie compiled a checklist of known species from caves in South Africa. He plans to present a talk at the colloquium.

UNIVERSITY TRANSKEI

At the University of Transkei **Dr Michael Somers** became a new member and he indicated that he might have students interested to do research on spiders in the Transkei. Presently **Kamva Qwede** is one of his MSc students doing a survey of spiders at Marion Island. The Island was last surveyed in 1968. Ed: Watch this space next year for more information.

UNIVERSITY VENDA

Stefan Foord completed his PhD dissertation on the "Systematics of the Hersiliidae (Arachnida: Araneae) from the Afrotropical Region". In this study two new genera were described, while another two were recorded from the Afrotropical Region for the first time. A total of 48 species were studied of which twenty were described as new. The remaining 28 species were redescribed and drawn and four new synonyms recognized and a new lectotype and new type designated. He provided a key to all the species. The thesis will be published in a series of articles.

Stefan is now involved on a longterm project, investigating arachnid diversity in the Savanna Biome of South Africa. The project started at the beginning of 2004. The initial focus of this project will be geographically limited to the Soutpansberg centre of endemism and include estimating species richness levels for different habitats and heterogeneity among spider assemblages. Much of this work is being done by **Maria Mafadza** as part of her MSc degree. Field work will continue until February 2005 and broaden into a macro-ecological approach in 2006 that should include large parts of South Africa's Savanna Biome. This project is undertaken in collaboration with the University of Pretoria and the ARC-Spider Research Centre.

Institutional News

SPIDER CLUB OF SOUTH AFRICA

A new and very enthusiastic management for the club has been elected in July 2004. The main of the Spider Club is to reach adults and children and turning them into nature enthusiasts with a special love for spiders.

During the year the club took part in several events such as: A Bird Fair at the Johannesburg Zoo and an Open Day at Lonehill in September and of course Yebo Gogga and Yebo amaBlomo from 7 - 10th October in the new Zoology Museum at the University of the Witwatersrand.

During the year the club took part in several events such as: Mogales Gate, Cradle of Humankind World Heritage Site on the West Rand, Suikerbosrand Nature Reserve, Fountains Valley in Pretoria, Tswaing Crater and Silkaatsnek near Brits. Specimens collected at outings in Gauteng Province go to Marianne Forsyth of GDACE (Gauteng Directorate of Agriculture Conservation and Environment) and then to the National Collection.

In February this year **John** and **Astri Leroy** on behalf of The Spider Club and **Peter Croeser** of the Natal Museum and **John Roff** from the Botanical Gardens in Pietermaritzburg helped with public Spider Weekend at Umgeni Valley near Howick in KwaZulu Natal hosted by The Wildlife Society. Night and daytime walks were arranged, slide presentations were given by Peter Croeser and the Leroy's and John Roff arranged some fun educational events.

JOHN AND ASTRI REPORT:

Late last year *Spiderwatch* was revised and errors in the text corrected. The revised names for baboon spiders were included and the section on spider venom changed quite a bit. A new cover showing *Harpactira namaquensis* at about double life size was designed and the book has been renamed Spiders of Southern Africa. Baboon spiders seems to catch the popular imagination.

In co-operation with DACEL, Johannesburg City Parks and the Lepidopterist Society we are facilitating an education centre at the Entomological Reserve in Ruimsig, Roodepoort which was proclaimed in the late 1970's to save the Roodepoort copper butterfly. The proposed buildings on the reserve are planned to be the new home for The Spider Club. There will be a laboratory with microscopes already donated by De Beers Consolidated Diamonds, a small hall, kitchen ablutions etc. which means that a nucleus for an arachnological and entomological facility is well on its way.

The surveys in the National Botanical Gardens continue. We are working on a checklist for the Lowveld National Botanical Gardens and plan to have it finished within a year. The Pretoria National Botanical Gardens have asked us to do the same for them and the checklist for the Walter Sisulu National Botanical Gardens in Roodepoort will be updated during the course of the next year as a number of new records need to be added. At the same time as collecting for checklists at the three National Botanical Gardens mentioned we take public day and by night "spider walks" to help to raise money for the local branches of The Botanical Society and these are very popular.

At present our work in the Northern Cape is in abeyance but will be continued when time and money are available to carry on.

OBITUARY

Martin Filmer died in Johannesburg on 14th September this year after a short illness.

Amongst other things he was author of SA Spiders and Identification Guide and long time chairman of The Spider Club.

Many people will miss him immensely.

INTERESTING WEBSITES

The ARC has a vision "To be an internationally recognized centre of excellence in agricultural science and innovation". Visit their website at <http://www.arc.agric.za>.

A web site at www.spiders.co.za has been started for the Spider Club and will be added to as time goes on.

Museum Online South Africa (<http://media1.mweb.co.za/mosa>) is a quick access to museums, organisations, associations, societies, etc. in South Africa.

The International Society of Arachnology is the premier international scientific society devoted to arachnology. <http://www.arachnology.org/ISA/index.html>.

EcoPort has a dream about an electronically "Great Encyclopedia of Life" of all the species in the world. Check out their website: <http://www.ecoport.org>.

New publications on African arachnids

ALDERWEIRELDT, M. & VAN HARTEN, A. 2004. A preliminary study of the wolf spiders (Araneae Lycosidae) of the Socotra Archipelago. *Fauna of Arabia* 20: 349-356.

BIRKHOFFER K, SCHEU S, HENSCHER JR. in press. Does territorial behaviour in the desert-living spider *Leucorchestris arenicola* (Araneae: Sparassidae) affect spatial pattern in populations? *Cimbebasia*.

BOSSELAERS, J. 2004. A new *Garcorops* species from Madagascar copal (Araneae: Selenopidae). *Zootaxa* 445: 1-7.

BOSMANS, R. 2003. A checklist of the spiders of Tunisia, with description of a new species of *Palliduphantes* Saaristo & Tanasevitch (Araneae: Linyphiidae). *Kaupia Darmstädter Beiträge zur Naturgeschichte* 12: 89-109.

CUMMING, M.S. & WESOLOWSKA, W. 2004. Habitat separation in a species-rich assemblage of jumping spiders (Araneae: Salticidae) in a suburban study site in Zimbabwe. *Journal of Zoology*, London 262: 1-10.

DIPPENAAR-SCHOEMAN, A.S. 2004. The trapdoor spiders of South Africa. *Science in Africa*, April: 1-5 (on line journal <http://www.scienceonline>).

DIPPENAAR-SCHOEMAN, A.S. 2004. The crab spiders of Africa. *Science in Africa*, November: 1-5 (www.scienceinfrica.co.za/2004/november).

DIPPENAAR-SCHOEMAN, A.S., VAN DER WALT, A.E., LE ROUX, E. & VAN DEN BERG, A. (in press). The spiders of the Swartberg Nature Reserve in South Africa (Arachnida: Araneae). *Koedoe*.

DIPPENAAR-SCHOEMAN, A.S. & MYBURGH, J. (in press). Checklist of the spiders from caves in South Africa (Arachnida: Araneae). *Cimbebasia*.

DIPPENAAR-SCHOEMAN, A.S., VAN DER MERWE, M. & A.M. VAN DEN BERG. (in press). Habitat preference and seasonal activity of *Microstigmata zuluense* (Lawrence) and *M. longipes* (Lawrence) from Ngome State Forest, South Africa (Araneae: Microstigmatidae). *Cimbebasia*.

DIPPENAAR-SCHOEMAN, A.S. & VAN HARTEN, A. (in press). The crab spiders (Araneae: Thomisidae) from mainland Yemen and the Socotra Archipelago: 1. Genus *Thomisus* Walckenaer, 1805. *Fauna of Saudi Arabia*.

DIPPENAAR-SCHOEMAN, A.S. & WASSENAAR, T.D. (in press). A checklist of spiders from the herbaceous layer of a coastal dune forests ecosystem at Richards Bay, KwaZulu-Natal, South Africa (Arachnida: Araneae). *Cimbebasia*.

DIPPENAAR-SCHOEMAN, A.S., VAN DEN BERG, A.M., VAN DEN BERG, M.A. & FOORD, S. H. (in press). Spiders in avocado orchards in the Mpumalanga Lowveld of South Africa: species diversity and abundance (Arachnida: Araneae). *African Plant Protection*

DRUCE, D., HAMMER, M. & SLOWTOW, R. 2004. Sampling strategies for millipedes (Diplopoda), centipedes (Chilopoda) and scorpions (Scorpionida) in savanna habitats. *African Zoology* 39: 293-304.

FITZPATRICK., M.J. (in press) The Afrotropical species of *Zelotes* (Araneae: Gnaphosidae). *Bulletin of the British Arachnological Society*.

FITZPATRICK., M.J. (in press) Two new genera of Zelotine spiders from Central Africa (Araneae: Gnaphosidae). *African Invertebrates*.

FITZPATRICK., M.J. (in press) Three new species of Zelotine spiders from Africa (Araneae: Gnaphosidae). *Arnoldia*, Zimbabwe.

FOORD, S.H. & DIPPENAAR-SCHOEMAN, A.S. (in press)/ A revision of the Afrotropical species of *Hersiliola* Thorell and *Tama* Simon with description of a new genus *Tyrotama* (Araneae: Hersiliidae). *African Entomology*

GALLON, R. C. 2003. A new African arboreal genus and species of theraphosid spider (Araneae, Theraphosidae, Stromatopelminae) which lacks spermathecae. *Bulletin of the British Arachnological Society* 12: 405-11.

GALLON, R.C. 2004. *Trichognathella*, replacement name for the genus *Trichognatha* Gallon 2002 (Araneae, Theraphosidae, Harpactirinae). *Bulletin of the British Arachnological Society* 13: 62.

GALLON, R.C. 2004. *Harpactirella leleupi* Benoit, 1965 is a junior synonym of *Idiothele nigrofulva* (Pocock, 1898) (Araneae, Theraphosidae, Harpactirinae). *Bulletin of the British Arachnological Society* 13: 95-96.

GALLON, R. C. (in press). On a new genus and species of theraphosid spider from Serpent Island, Mauritius (Araneae, Theraphosidae, Eumenophorinae). *Bulletin of the British Arachnological Society*.

GALLON, R., EZENDAM, T. & VAN OVERDIJK, S. 2004. Two incidences of the theraphosid *Harpactirella* associating with other arthropods. *Newsletter of the British Arachnological Society* 99: 9-10.

GRISWOLD, C. E. 2003. "Araneae, Spiders", pp. 579-587. In : S. Goodman and J. Benstead, eds., *The Natural History of Madagascar*. University of Chicago Press, Chicago.

HADDAD, C.R. 2004. A complex of spiders mimicking *Anoploclepis custodiens* ants in South Africa. *Kovshaan* 31: 13-16.

HADDAD, C.R. 2004. A revision of the spider genus *Graptartia* Simon, 1896 (Araneae: Corinnidae). *African Entomology* 12: 71-81.

HADDAD, C. R. & DIPPENAAR-SCHOEMAN, A. S. (in press) Spiders (Arachnida: Araneae) inhabiting abandoned mounds of the snouted harvester termite *Trinervitermes trinervoides* (Sjöstedt) (Isoptera: Termitidae: Nasutitermitinae) in the Free State, with notes on their biology. *Cimbebasia*.

HADDAD, C. R. & DIPPENAAR-SCHOEMAN, A. S. (in press). Egg parasitism of an *Ooencyrtus* sp. (Hymenoptera: Encyrtidae) on the green lynx spider *Peucetia striata* (Araneae: Oxyopidae). *Cimbebasia*.

HADDAD, C. R., LOUW, S. VDM & DIPPENAAR-SHOEMAN, A. S. (in press). Spiders (Araneae) in ground covers of pistachio orchards in South Africa. *African Plant Protection*.

HADDAD, C. R., LOUW, S. VDM. & DIPPENAAR-SCHOEMAN, A. S. (in press). Effects of pesticide management practices on the spider fauna of orchards: a review. *Agriculture, Ecosystems and Environment*.

HADDAD, C. R., LOUW, S. VDM. & DIPPENAAR-SCHOEMAN, A. S. 2004. An assessment of the biological control potential of *Heliophanus pistaciae* (Araneae: Salticidae) on *Nysius natalensis* (Hemiptera: Lygaeidae), a pest of pistachio nuts. *Biological Control* 31: 83-90.

HADDAD, C. R., LOUW, S. VDM. & DIPPENAAR-SCHOEMAN, A. S. (in press). Spiders (Araneae) in ground covers of pistachio orchards in South Africa. *African Plant Protection*.

HENDRIXESON, B.E. & BOND, J.E. 2004. A new species of *Stasimopus* from the Eastern Cape Province of South Africa (Araneae, Mygalomorphae, Ctenizidae), with notes on its natural history. *Zootaxa* 619: 1-14.

HENSCHER JR. 2004. Subsidized predation along river shores affects terrestrial herbivore and plant success. In: *Food webs at the landscape level*. Polis GA, Power ME, Huxel GR (eds). University of Chicago Press, Chicago: 189-199.

HENSCHER JR, MTULENI V, PALLETT J, SEELY MK. 2003. The surface-dwelling arthropod fauna of Gobabeb with a description of the long-term pitfall trapping project. *Journal Namibia Scientific Society* 51: 65-92.

New publications on African arachnids

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THE AFRICAN
ARACHNID DATA-
BASE (AFRAD)

AFRAD—the African Arachnological database



AFRAD was initiated in 1995 by ARC-Plant Protection Research Institute and the Koninklijk Museum voor Midden-Afrika at Tervuren, Belgium in accordance with the obligations of the Convention on Biological Diversity. The main aim of AFRAD is to promote research on arachnids in the Afrotropical Region. AFRAD is an umbrella project dedicated to the unification and enhancement of biosystematic research on arachnids in Africa and adjacent islands. Participation is based on free association and collaboration and gives specialists of the various arachnid groups the opportunity to manage and co-ordinate their own field of expertise while receiving credit for their inputs. Progress is reported on annually in the newsletter of the African Arachnological Society (AFRAS).

AFRAD REPORT BACK

Most African countries are still in the process of compiling baseline information in the form of national checklists. The absence of species lists is a serious obstacle when it comes to compiling Red Data Lists as there is no logical reference point for species occurrences in a country.

AFRAD has provided a remarkable stimulus to arachnid research in Africa since the launch of the project and several projects have been completed or are in progress.

Ansie spent a week at Tervuren in 2004 gathering data for AFRAD. AFRAD contains now a complete species list of about 6033 species that are presently known from the Afrotropical Region.

This data was incorporated into a MYSQL database developed by an ARC-IT team. Distribution data for each species have been entered based on taxonomic, as well as ecological papers.

At present we are able to compile checklists for each country in the Afrotropical Region. As soon as all the data have been entered we hope to go live at www.arc-afrad.agric.za. Descriptive data on the families, genera and species are also entered with keys to genera and species were available as well as line drawings and colour images. This is an enormous task and we will make parts live as we progress.

For the first time an inventory is available on African spiders. It was found that the spider fauna of this region is remarkably rich when compared with some other faunas. A total of 72 families (67%) of the world's fauna occur here represented by about 963 genera (27%) and 6055 species (16%).

However the taxonomic information on African spiders are still rudimentary and only 146 genera (16 %) have been revised while 24 % are monogeneric.

On average 41 % of species revised are new to science while 23 % are synonyms. Of the known genera 53% are endemic to Africa and 9% show some form of Gondwanian elements in their distribution. Some examples of our present knowledge on spider diversity :

Country	Number spp.
Angola	214
Botswana	202
Ethiopia	500
Kenya	407
Lesotho	170
Madagascar	488
Malawi	137
Namibia	340
South Africa	1700
Zaire	397
Zimbabwe	180

At the moment we know of the following countries where spider surveys are being undertaken, namely:

Botswana
Comores
Congo
Egypt
Ethiopia
Ivory Coast
Kenya
Lesotho
Madagascar
Malawi
Namibia
Reunion
South Africa
Swaziland
Tanzania
Yemen

URGENT REQUEST

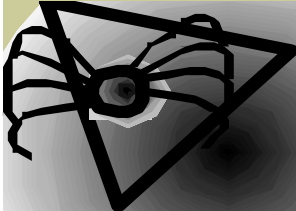
To be able to maintain and regularly update this database we need copies of the new papers published on spiders in the Afrotropical Region. We would appreciate receiving both taxonomic and ecological papers.

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SOUTH AFRICAN NATIONAL SURVEY OF ARACHNIDS (SANSA)



SANSA is a national atlassing programme dedicated to the unification and enhancement of research on arachnids in South Africa.

At the moment 37, (mainly spider) projects are running in association with the following:

Universities:

Pretoria, KwaZulu-Natal, Free State, Venda, North West, North, Transkei.

Museums:

Transvaal, Bloemfontein, South African. Nature Conservations: Gauteng, Western Cape, KwaZulu-Natal. Parks: SAN parks.

Other:

Inland Invertebrate Initiative and Spider Club.

Co-ordinator:

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www.arc.agric.za

SANSA—Projects in progress

SPIDERS IN AGRO-ECOSYSTEMS

Spiders from Bt maize fields in South Africa
 Kenya (University of North West; ARC)

Spiders from Bt cotton in South Africa
 (University of Pretoria; ARC)

Spiders associated with termites (University of
 Free State; ARC)

Spiders from Pistachio nuts (University of the
 Free State; ARC)

Spiders from avocado orchards (ARC)

Spiders from citrus orchards (ARC)

SPIDERS FROM CONSERVED AREAS

Spiders from the Tembe Elephant Park (University
 of Pretoria; University of Free State, ARC)

Spiders from Swartberg Nature Reserve (ARC;
 Western Cape Nature Conservation)

Spiders from the Kamanassie Nature Reserve
 (ARC; Western Cape Nature Conservation)

Spiders of the Ndumu Nature Reserve (University
 of the Free State; ARC)

Spiders from Western Soutpansberg (University of
 Venda; University of Pretoria; ARC)

Spiders from Suikerbosrand Nature Reserve (ARC;
 Gauteng Nature Conservation)

Spiders from Nylsvley Nature Reserve (ARC)

Spiders from the Rustenburg Nature Reserve
 (ARC)

Spiders from Kruger National Park (ARC)

Spiders from the Arid SAN-parks (ARC)

Spiders from the St Lucia Wetland Park (OVI; ARC;
 KZN Nature Conservation)

Spiders from Tswalu Nature Reserve (ARC; De
 Beers)

Spiders from Botanical Gardens (Spider Club)

Spiders from caves (University Pretoria; Gauteng
 NC; ARC).

SPIDERS FROM FLORAL BIOMES

Spiders of Grassland Biome (ARC; Universities of
 KZN; Free State)

Spiders of Savanna Biome (ARC; Univ. of Venda,
 Univ. of Pretoria; Univ. of the North)

Spiders from Forest Biome (ARC; Univ. of Pre-
 toria, KZN, Univ. of Free State, Western Cape
 NC; Univ. of KwaZulu-Natal)

SPIDERS OF THE PROVINCES

Gauteng (GAP programme of Gauteng Nature Con-
 servation; ARC)

Spiders of KwaZulu-Natal (ARC; KZN-NC)

Arachnida of the Free State (Nat Mus Bloemfon-
 tein; Univ. Free State; ARC)

OTHER

ERA - Quelea: Springbok Flats (ARC)

ERA - tsetse fly: Helsgate, KZN(OVI, ARC)

Spiders from caves in South Africa (Gauteng NC;
 University of Pretoria; ARC)

Red data listing (ARC; Gauteng Nature Conserva-
 tion; Inland Invertebrate Initiative; National Mu-
 seum Bloemfontein)

CATALOGUE AND SPECIES LIST COMPLETED/ IN PREP.

Pseudoscorpions of SA (ARC) (completed)

Solifugae of SA (ARC) (completed, to be published
 2005)

Mygalomorphae of SA (ARC) (completed)

Thomisidae of SA (ARC) (in prep)

Araneidae of SA (ARC) (in prep)

Araneomorphae of SA (ARC) (in prep)

Arachnida of Gauteng (ARC; Gauteng NC) (in
 prep)

