

Catching up

Over one hundred participants from almost twenty countries attended the First All Africa Scientific Conference on Edible and Medicinal Mushrooms, held at the Makerere University in Kampala, Uganda, from 25 to 29 October. African mushroom cultivation may still have a lot of catching up to do compared to the rest of the world, but this conference demonstrated just how determined the African mushroom industry is to develop.

The conference was mainly attended by scientists from Uganda and its neighbouring countries (Tanzania, Congo, Kenya), but participants also came from more distant countries such as Ethiopia, Ghana and Nigeria. Representation from South and North Africa was remarkably absent, suggesting that there is little interaction between Central Africa and the coastal countries. The Maghreb countries may possibly be attempting to intensify their ties with the Middle East, whereas South Africa is attempting to link up with the industrialized countries.

To save costs, simultaneous interpretation had not been arranged. This was a pity, since there were no participants from the 24 French-speaking African countries other than one Congolese delegate, nor from countries where Portuguese is the main language. There was limited interest from other continents, probably as no commercial value can (yet) be achieved from African mushroom cultivation. There were only a handful of non-Africans: a dozen Europeans, five Americans and three Asians. Just one Dutchman was present: Mr Bram Van Nieuwenhuijzen, on a mission for PUM (www.pum.nl). Clearly project developers, machine sellers, spawn and packaging producers -except Mycelia and SacO2- are still reticent to enter the African market. However, two producers of mushroom nutraceuticals - US-based Aloha Medicinals and Australian Concord Health - take a quite different view.

Only an hour had been reserved for participants to register prior to the conference. This was not such a good idea, as the visitors all seemed to interpret the starting times with varying degrees of flexibility. Luckily, however, Africans are far more relaxed about delays than Westerners: the opening speeches were also a little longer than planned.

View of the future

The opening ceremony demonstrated that the organiser, Prof. Olila, had managed to rouse interest for the event at a very high level. The Ugandan Finance Minister personally opened the conference and other VIPs from ministries and public bodies were all eager to welcome the attendees. The Dean

of the Faculty was also prominently present, possibly because the national Ugandan TV channel covered the event. This fact also showed how seriously the event was taken.

The first series of presentations was scheduled after the opening speeches. Prof. S.T. Chang had been invited as the keynote speaker. He presented the audience with his view of the future development of the African mushroom industry. He advocated stimulating mushroom cultivation for its role in valorising lignocellulosic wastes into products with important nutritional, medicinal and economic values and he stressed the necessity of political support in this respect.

A number of speakers from outside Africa took the stage before lunch, so the audience could form an impression of mushroom cultivation in industrialised countries. Figures presented by Mr Van Nieuwenhuijzen revealed that only 0.5 % of the world's mushroom output is produced in Africa, with South Africa accounting for 90% of this total.

Health and gender issues

After lunch, the stage was handed over to the African speakers, including a dozen students and young researchers who could present their scientific work thanks to a grant from the ISMS. The subjects discussed basically fell into two groups: the results of cultivation experiments, mainly with lignivorous mushrooms, and the medicinal aspects of indigenous mushrooms. No revolutionary news was revealed about the first subject. African mushroom cultivation is still in its infancy regarding development; only small-scale trials have been carried out and the results are limited.

We found the second subject particularly interesting. Certain species of mushroom are expected to be able to play a role in fighting HIV. Prof. Mshigeni presented the promising results of a clinical trial conducted in Tanzania with *Ganoderma lucidum* capsules, supplied by Concord Health. Besides this, some 'higher' fungi are recognised and used for their alleged health-promoting effects in African tribal traditions. Prominent among these fungi is *Termitomyces*, a genus whose many representatives live in

symbiosis with their own specific species of termites. *Pleurotus tuber-regium* was also listed as a promising species. To study their alleged beneficial influence on health, research into substances contained in mushrooms used by local medicine men is being carried out simultaneously in several countries. But, due to the lack of good identification literature it is often difficult to attribute scientific names to species. John Holiday of Aloha Medicinals suggested growing the mycelium of indigenous *Termitomyces* species in the same manner as *Cordyceps mycelium*. In the absence of a cultivation method, this idea might be worth exploring further.

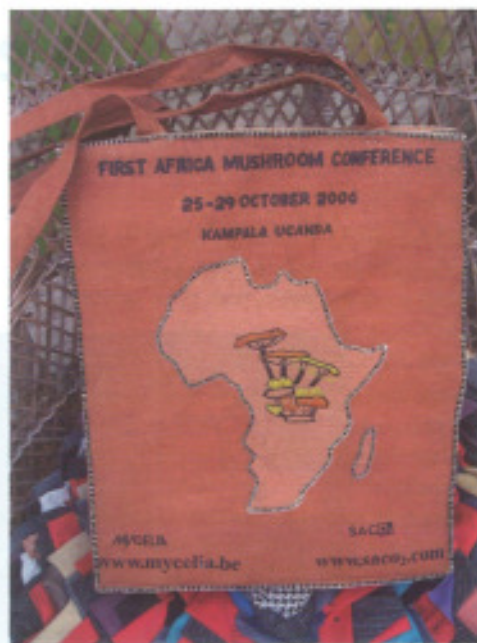
This brings us to the fact that Africa lacks the knowledge and infrastructure to propagate mycelium under ultra-hygienic conditions. Mycelia's presentation therefore attempted to provide an insight into the basic principles of mycelium production. After this presentation, Dr. Omon Isikhuemhen suggested setting up a central African spawn laboratory in a still to be chosen location.

Regarding the 'gender issue', the conference scored very well indeed: there was a remarkably high number of ladies in the audience who were definitely very knowledgeable. They accounted for almost half of the presentations and more than half of the critical questions. Although we had hoped and expected to see participants dressed in beautiful traditional garments, this only happened incidentally during the social events. Dr. Omon Isikhuemhen, a Nigerian residing in the USA, was an eye-catching exception with his beautiful outfits, which differed every day.

Establishment of ASSEMM

Two major conclusions could be drawn at the end of the conference. Firstly, mushroom cultivation on the African mainland is incredibly far behind the rest of the world, and secondly, the Africans are determined to change this.

Before the event ended, Dr. Isikhuemhen proposed establishing an African Mushroom Society. This initiative was welcomed with unanimous support. After some debate, the name 'African Scientific Society for Edible



Congress bag made of Ugandan bark cloth, designed by Mycelia/SacO2.

Pictures: Magda Verfaillie.



The opening speech by Prof. Chang.



Attentive audience.



Comments and questions after the first series of presentations.

and Medicinal Mushrooms' (ASSEMM) was chosen. Two representatives will be appointed for every region (North, Central, West and Southern Africa). We think this initiative has great prospects for success, especially with Mr Isikhuemhen as the main motivator behind the scenes. At the same time, Ghana was chosen as the host

venue for the next 'African Scientific Conference on Edible and Medicinal Mushrooms' in 2009, to be organised by Prof. Gideon Adotey.

The official conference programme ended with the inevitable words of thanks to the organisers, sponsors and important guests. An informal garden reception in the Makerere University



Group picture of the participants of the mushroom foray.



Dr. Omon Isikhuemhen hanging up a poster.

guesthouse gave the participants the opportunity to network and share their thoughts on the conference.

Mushroom foray and conclusion

The real mycofiles were invited for a study trip into the Mabira Forest, one of the most beautiful stretches of tropical forest in Uganda, on the day after the conference. Although a large part of this forest will have to make way for sugar cane plantations soon, we could still enjoy the unspoiled nature and the millions of soldier ants running over our ankles. Although the end of the rain season is not an ideal time for mushrooms, we found almost a hundred species. They were collected for identification by Dr. Ipulaat

Perpetua of Makere and Mrs Aimee, the American mycologist who had accompanied Omon Isikhuemhen to Africa for this purpose. An oyster mushroom grower in Jinja was visited later that day. The farm was comparable to the small-scale farms we visited in April this year (see issue 17 of Mushroom Business).

The trip ended at the sources of the river Nile, which are unfortunately covered by a massive body of water since the construction of a dam here. Upon our return to Kampala we were treated to a commercial closing reception offered by Aloha Medicinals. This was an excellent opportunity to compliment Prof. Deo Oilil on all his efforts which made this first All African Conference possible. It was a

huge success, despite a few beginner's mistakes.

Prof. Oilil had also organised a two-day workshop after the weekend, specifically aimed at small-scale mushroom growers, for whom the conference was too expensive and too academic. Mr Bram Van Nieuwenhuijzen, the Netherlands PUM delegate, will report on this in one of the next issues of this magazine.

In our opinion, this conference was a highly successful first step towards placing the African mushroom business on the map. It was an ideal opportunity for Westerners to make contacts with researchers and entrepreneurs. Those not at the event definitely missed out on an excellent chance to catch this train before it is up to full speed!

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