



NETHERLANDS EXPERTISE CENTRE
FOR TROPICAL APICULTURAL RESOURCES

NECTAR NEWS

Edition 2012

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NECTAR is a nongovernmental non profit association of tropical beekeeping experts in the Netherlands and abroad. It was founded in 1990. NECTAR stimulates, promotes, and advises on (sub) tropical beekeeping activities to interested parties in development assistance programmes throughout the world.

EDITORIAL

Nectar:

Nectar is a sugar-rich liquid produced by plants. It is produced in glands called nectarines, either within the flowers, in which it attracts pollinating animals, or by extrafloral nectaries, which provide a nutrient source to animal mutualists, which in turn provide protection.

Although a large variety of pollinating insects gather nectar for either direct consumption or later usage, only nectar collected by *Apis mellifera* can be called honey. Especially the world of trade in honey regulates that honey can only be called as such if collected by honeybees (*Apis mellifera*). Traditionally, the harvest and use of “honey” in tropical parts of the world is principally coming from other beespecies, like *apis dorsata*, *apis cerana* but also from, and not unimportant at all, stingless bees. Its potential for local market is extremely important. Many traditional beekeeping techniques became misunderstood or forgotten as *apis mellifera* was introduced in those countries with its higher yield and improved management techniques. In some countries, the evidential importance of local beespecies as contributor for biodiversity and foodsecurity surpasses by far the value of honey being harvested from the imported European honeybee. This is now recognized in for instance the Philippines where the government is supporting local institutes and organizations more actively by promoting its own local force of pollinators. The switch to organic farming practices makes this support more understandable and logical to follow.

In this edition of NECTAR NEWS :

Reports on activities by NECTAR members and other contributors. there are special reports from Surinam, Tanzania and the Philippines. The red ribbon of these stories concerns honey. Also a short report on the recently held Apiecotech in Belgrade, Serbia.

SURINAM

Leen van 't Leven (NECTAR president)

As usual Leen van 't Leven visited the Surinam company “SURIBIJ” and worked there with the africanized honeybee (AH) in the districts Commewijne, Wanica and Saramacca.

Driven by curiosity a survey has been started to know more about quality of the honey products sold in the supermarkets. Small bottles of 125 ml honey, from four different producers/packers were bought at random. In Surinam the smallest bottles of honey are mainly bought as medicine for health purposes. A fifth supermarket size bottle from Suribij has been added. Honey from those bottles was analysed by melissopalynologist Drs. Jaap Kerkvliet. Details of the analysis can be obtained from the library of Kerkvliet via the sample number. Some of his conclusions follow here:

- Sample A 1654. Longan flower honey. Packed under the name of Mr. Queen. Sugar content 80,3 %. 752 pollen in 10 g. This is too low for honey and should be more than 3000. Electrical conductivity 40 microSiemens/cm. Too low for honey. A normal value is 300. HMF 150-300 mg/kg. This indicates invert sugarsyrup manufactured through acid-hydrolysis of sacharose. This is not honey.
- Sample A 1655. Bebe (*Pterocarpus officinalis*) honey. Produced by Rob Breinburg. Sugar content 80,8%. 222.000 pollen in 10 g. This very high value indicates that this honey is squeezed from the combs and not extracted. Taste of the honey is sweet. 70% of the pollen is *Ilex guianensis*. This also indicates that the honey is squeezed from the combs because honey from *Ilex* is very bitter. 9% of the pollen is from *Pterocarpus*. Electrical conductivity 400 microSiemens/cm. HMF < 5 mg/kg. Good honey, rightly called Bebe honey.
- Sample A1656. Parwa (*Avicennia germinans*) honey. Packed by Pasifico and probably produced by the Sober family in the Coronie district. Sugar content 79,0%. The honey is in state of fermentation. 12.450 pollen in 10 g. An important percentage of the pollen is from *Avicennia*. Electrical conductivity 430 microSiemens/cm. HMF <5 mg/kg. This honey is rightly called Parwa honey but deteriorating.
- Sample A 1657. Suva honey. Packed by B en B trading. Sugar content 80,3 %. 498 pollen in 10 g. Electrical conductivity 40 microSiemens/cm. HMF 150-300. This is not honey apparently from the same stock as sample A 1654.
- Sample A 1665. Varia honey in commercial bottle of 350 ml. Produced by Suribij. Sugar content 81,5 %. 28.640 pollen in 10 g. Pollen mainly from *Triplaris surinamensis*. Electrical conductivity 230 microSiemens/cm. HMF 40 mg/kg. Many yeasts. This honey has been heated to kill the yeasts. Monoflower honey from *Triplaris surinamensis* in Surinam called Mierahoedoe honey.

Three of four small bottles did not have the quality as may be expected for use as medicine.

In Surinam teenage children had big problems to obtain local information for their projects and presentations at school. For that reason a publisher, Veka Productions, started a series small booklets on local issues to provide useful information for this target group. In this series L. van 't Leven sr. wrote the booklet "Bijen houden in Suriname" (Beekeeping in Surinam) which has been used already several times in school projects.

AGROMISA

To support the Agromisa Foundation <http://www.agromisa.org/> in sending copies of the Agrodoks 32 and 42 free of charge to beekeepers in developing countries our complete stock of 18 copies of these two beekeeping manuals in Portuguese language were handed over to Agromisa.

NBV (Netherlands Beekeepers Association), commission international contacts.

The collaboration of Nectar with the international committee of the Dutch Beekeepers Association (NBV) got more impact this year. Besides the requests coming to that committee for money and materials, which were not of our interest, two projects came up. The NBV-Int. was requested by the Organisation for Agricultural Development, Agriterra, to join them in projects in Congo and in Bosnia-Herzegovina.

In Bosnia the NBV-Int. surveyed the possibility of having a working relationship with the Beekeepers Association of the Una Sana Canton in the Moslim-Kroatian Federation. Coordinator for this project is Cees Veldkamp.

In the Democratic Republic of Congo the NBV-Int. was asked to form a joint relationship with the Federation of Beekeepers Cooperatives in the South Kivu province. Coordinator for this project is Frank Leenen.

Nectar advised for both countries on beekeeping issues.

Following a short version of the yearreport of the committee

Year report 2011 and planning 2012

(contact: Klaas van der Lee, secretary, for the full version of this report)

The commission, which exists of 6 members, serves as a pool on voluntary basis for bilateral contacts. Mostly by email. Members being abroad realize new contacts on beekeeping and associated products.

Asali, Sud-Kivu, Congo.

Contactperson: Frank Leenen.

This project, which arrived upon the request of Agriterra. <http://www.agriterra.org/en>

Despite some setbacks and change in organisational structures of Agriterra and increasing uncertainties on the political level in the country, contacts with the local beekeepers remain intact. Frank Leenen has been requested to prepare a technical visit which up to date has not yet been realized.

Marokko.

The NBV <http://www.bijenhouders.nl/> received a request from Morocco to initiate a program for exchange of information and support. Suggested was to effectively combat analphabetism through education and supporting beekeeping. As the committee does not avail of the necessary tools it has been suggested to another interested party.

Bosnië, Spusc.

Contactperson: Kees Veldkamp

In the province of Una Sana, 8 beekeepers associations have organised themselves into the SPUSC (Savez Pcelara Unsko Sanskog Cantona).

Purpose is to improve supporting interests. In view of forthcoming membership of the EEUU, organizations are approached within that region. Agriterra has been asked how and in what sense this could be developed in a constructive manner.

Following a visit of Agriterra in Bosnia it has been concluded that a collaboration is desired and exchange of information useful.

Having experience in both Bosnia and Croatia, Mr. Kees Veldkamp has been appointed as coordinator for this collaboration. Last November, both Kees and Leendert visited the organization and reconfirmed the conclusion for initial support. A finance proposal will be sent to the IFAD.

Bosnie, Republica Srpska.

During the same trip, a visit was planned to the beekeepers federation of the republic of Srpska which send a request as well to Agriterra. The conclusion there was of a different nature and eventually declined. However, it was advised to set up a data bank to facilitate local beekeepers to have contact amongst each other in Bosnië-Herzegovina.

In the meantime the development organization LTO has closed a 3 year contract with the IFAD in order to support organisations in the field of agriculture in Bosnië. Agriterra requested to collaborate with both SPUSC and SRPSKA.

Incidental issues mentioned in the yearreport :

The British beekeeping organisation (BBKA) apparently seems to be subsidised by the pesticide industry. It is advocated not to accept this sort of funding.

A request for funding from Gambia was declined.

The chamber of commerce in Marmaris, Turkey, requested Financial support for a so-called Honey Village that would serve as a centre for beekeepers, trainings and sale of honey. This also was declined.

Prospect for 2012

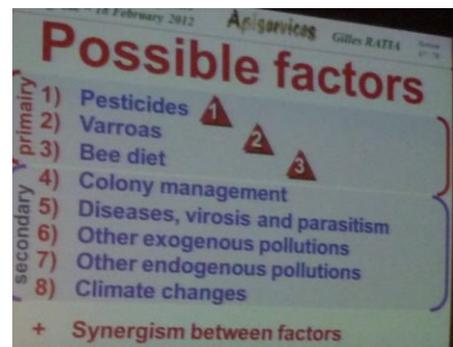
Projects in the pipeline are both in Bosnië/Herzegovina and South Congo. It is expected that support to those organizations will develop further with the accent on advice in organizational and technical aspects. It is clear that mutual visits should be beneficial to those expectations. Coordination will be in the hands of Kees Veldkamp.



The Role of Beekeeping Technologies, Health Care of Bees, and Environment in the Quality of Bee Products

A timely event it seems for a country like Serbia that applied for membership of the EEUU. The country is eager to enter but realizes the constraints accompanying its process. Beekeepers produce excellent quality honey and honey related products and eager to share this in the open market. Organizing their annual honeyshow together with the Apimondia symposium allows for proper venue and platform for attention. The opening speech by the secretary of Agriculture seemed to confirm the desire for presenting beekeepers products to the European countries. Unfortunately this enthusiasm was not reflected in the presence of people or organizations from EEUU member countries. Hardly anyone from these countries.

The symposium consisted of local, national, regional and mondial issues covering the agenda. The president of Apimondia, Gilles Ratia, elaborated on the plausible causes of CCD. Causes may not be the same in all areas as circumstances differ enormously from region to region. Each continent, therefore, is to assess their own situation and investigate factorial causes, may it be one causal origin or a synergy of factors. A priority of 3 factors however may be confirmed as being mundial and therefore mutual concern from a list of 10.



A couple of speakers focussed attention to environmental influence on the quality of hive products ranging from chemical origin and leaving residues to GMO related factors. GMO being a hot issue at the moment in Spain by the way. The presence of foreign matters (contaminants) not being allowed or desired in hive products is of big concern and seems to make it more difficult to produce the pure product save for consumption as the seasons pass and, as it seems, is regarded as the responsibility and concern to solve this of the beekeeper alone.... This alone is a concern to Apimondia that intends to address the issue to a wider level like for instance the FAO. Awareness and advocacy are the terms being used. In terms of supplemental feeding a number of speakers presented papers. New technologies allow for new products in both nutrition as well as healthcare.

Evert Jan Robberts

Contributors to this newsletter:

TANZANIA : Organic African Honey

Haike Rieks- van Hal

As a tropical agriculturalist my involvement in development projects in Africa has been over 15 years, of which the last 10 years also involvement in beekeeping projects and honey production. A starters-course in beekeeping gave me the basic theory and practice, but nothing exceeds experience. In Zambia I noticed the potentials of honey production, large natural forested areas full with floral trees. Zambia is one of the few African countries that is able to

export honey to Europe. The production of honey is natural ... or organic? The question that follows: Is not all honey organic? According to the European regulations is not all honey organic. Honey needs to be certified first before it can be called organic. This while most areas in Africa, where honey production is found originates from natural forested areas where agricultural production is limited or not existing and where no pollution is found, meaning certification should be easy.

Honey production in Africa is still following a traditional system, where in the one country hives are made out of tree bark (Zambia) in another country (Tanzania) the use of tree bark is prohibited. Tanzania has as argument for this that with the use of bark-hives more trees are being destroyed compared to the use of log-hives. Traditionally these hives are hung high up in the trees, usually long distances away from the beekeepers homes and villages. Climbing high up in the trees is not a task for women, meaning traditionally beekeeping, or harvesting honey, was a men activity. It can easily be imagined that harvesting honey out of these traditional hives is not an easy task and often leads to excessive use of smoke. Also what is harvested is often not identified, due to harvesting at night and the desire to finish as fast as possible, which results regularly in harvesting non mature honey or even brood. As the honey is cut from the hives and pressed in, sometimes airtight, containers/buckets, the quality of the honey can easily deteriorate.

As mentioned above, to market organic honey in Europe it needs to be organic certified following European regulations and by a European accredited certifier. To achieve this, most certifiers want a detailed control system where all beekeepers, their occupied and unoccupied hives, the type of hives, the expected honey production, the nectar forage area and all details concerning transport and processing are recorded. This then needs to be updated before every harvesting season. These detailed records should limit fraud as much as possible. As most beekeepers keep their hive in forested areas which are very large and far away from their homes and villages, this is a time consuming and expensive exercise. It would be much easier to certify a complete areas as a 'wild harvested' product. Some certifiers do agree with this idea, but for others this is not acceptable. Organic production is actually concerning the production practices. So can organic honey only be harvested if the moisture content is correct? Also harvesting of brood, which is in many countries an excellent protein source for humans, is not allowed. The hives have to be made from organic material which excludes the use of wires in the common langstroth hives. Of course no use of pesticides or other chemicals can be used, nor may bees be feeding on flowers that have been sprayed with this. Additional feeding can only be done with organic honey, or if this is not available organic sugar and the combs should be made of organic wax. Many of these organic regulations on beekeeping are developed for beekeeping practices in Europe, methods that are hardly practiced in Africa.

Whether honey is organic yes or no, the most important aspect, as with all kind of products, is the quality. Without considering a good quality honey, organic certification does never achieve an added value.



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Potentials and Constraints of Philippine Cordillera Honey (*Apis dorsata*)

By Edmund B. Benavidez

Director, Saint Louis University Extension Institute for Small-Scale Industries Foundation Incorporated (SLU-EISSIFI)

<http://eissif.slu.edu.ph/index.php/pages/home>

Saint Louis University-Extension Institute for Small Scale Industries Foundation Inc. (SLU-EISSIF)

The Saint Louis University (SLU), located in Baguio City, Philippines is home to the Extension Institute for Small Scale Industries Foundation, Inc. (SLU-EISSIF). It is a private non-profit organization that was founded in 1975 in collaboration with the German catholic bishop's organization MISEREOR International through the Association of Catholic Universities of the Philippines (ACUP).

Objective is to perform extension work for small businesses in the form of entrepreneurship, management and technical training, consultancy, research and information. Today, SLU-EISSIF more committed and experienced responds to small business people needs with relevant and timely assistance. As a foundation, it has reached out widely and effectively to its growing clientele of micro, cottage, and small enterprises in the region; including beekeepers.

In 1997, the Belgian government through the Belgian Administration for Development Cooperation (BADC), the Flemish Association of Small Entrepreneurs and some private persons helped finance the organization and implementation of the "**Benguet Beekeeping Project**", which among other goals seeks to improve the honey production and markets, increase the number of beekeepers and strengthen the organizational framework of beekeepers in the Benguet province. The four year project implementation was initially guided by two NGO's in Belgium; the Study and Documentation Center for Appropriate Technology in Developing Countries (ATOL) and the Agency for Integrated Technical Cooperation (PROTOS), Belgium. At the end of the project period in June of 2001 and having assisted 121 farmer-beekeeper families, SLU-EISSIF continued its work with bees and beekeeping *Apis mellifera*. As a strategy to give continuity to this project in the long-run, the Belgian donors provided SLU-EISSIF with the Beekeeping Research and Service Center (BRSC).

In the 1970s, beekeeping (*Apis mellifera*) was introduced to individuals in the Cordillera. Raising colonies, however, was initially unsuccessful due to the parasitic varroa mites, bee eating birds, limited know-how in bee husbandry, and inadequate support from both the government and the non-government sectors. In the 1990s, the government, through the Department of Agriculture (DA), and the nongovernment organizations, notably the Plan International, supported beekeeping livelihood projects in various areas of the Cordillera. The sustained assistance and improved technology transfer efforts proved successful, such that more families eventually got involved. Later, the Saint Louis University Extension Institute for Small-Scale Industries Foundation Incorporated (SLU-EISSIFI) also initiated a similar project with farmers in Benguet.

- The Benguet Beekeeping Research and Service Center (BRSC) maintain approximately 150 colonies (*Apis mellifera*) that additionally to its didactic purposes supply this center with its own honey, queen bees, starter nucs and propolis. It processes, packages and sells honey in 320 grams and 500 grams labeled bottles, at a price of \$3.50 and \$4.21 respectively, under its own brand name, *Goldwell Sunflower Honey*.
- Aside from its own production, the greater part of it is purchased in bulk from beekeepers from different parts of the Cordillera. This serves in effect as a marketing strategy for small beekeepers to sell their produce in a cooperative way and in the end enjoy the advantages of reduced prices in certain beekeeping inputs and a free of charge usage of the BRSC facilities. In the event that a beekeeper has brought their own crude beeswax, the wax foundation molder is also available for their use under a sharing arrangement where 60% of the resulting foundation sheets are kept by the beekeeper and the remaining 40% stay in the stocks of the BRSC and made available to other beekeepers. SLU-EISSIF as an auxiliary organization of the university have become an alternative for students to explore the possibility of adding value to the products of bees in guided academic research. This could open possibilities for product diversification and beekeeping practices with other bee species to the future agenda of SLU-EISSIF to support beekeepers.

While beekeeping with *Apis mellifera* (*European honeybee*) is expected to stay, there is also a need to equally support the appropriate management and harnessing of the local honeybee species, generally understood as referring to *Apis cerana* (*eastern honeybee*), stingless bees of the *trigona* and *melipona* species and *Apis dorsata* (*giant honeybee*), which is the focus of discussion in this article. It is estimated that 25% of total national honey production was harvested from the hunted giant honeybee *Apis dorsata*. *Apis mellifera* still constitutes the biggest contribution at 69%, *Apis cerana* at 2% and Stingless bees providing 4%.

Opportunities and constraints of *Apis dorsata* honey in Abra Province of Cordillera Region

1. Locating Feral colonies and harvesting method

Honey hunting takes place in communal forest areas, with lush vegetation that provides abundant food for the bees. The hunting activity is variably carried out in the period between the months of December-May, when nectar is available for the bees to produce their honey. Usually, honey hunters wait until the honey is ripe, which they notice by observing the presence of wax cappings that seal the honey combs. The hunting activities must start early in the morning, preferably in a clear day. It is common practice amongst honey hunters to take advantage of the sunrise, which at a certain angle can reveal the flying pattern of foraging bees, thus leading to their nests. Observing the location where honeybees defecate, during their flight, also helps honey hunters to calculate the distance to the hive and the ripeness of the honey. Tracking *Apis dorsata* nest requires lots of skills, patience and a good physical condition, as this activity usually covers large areas of forest and difficult terrains, at times; it takes a day hike to reach the forest where people can gather honey.

It is common practice to make fire, which gives a lot of smoke, on the forest floor below the nest. The objective is to force the bees to vacate the nest and as they do, the honey hunter climbs to reach for the nest, carrying with him a sack or container to place the honey and brood after the whole nest is cut from the tree branch. At times the

hunter brings with him a portion of the “smoker built earlier”, this is used to ward off remaining bees in the nest. Bees don't necessary die so the remaining can go back to rebuild the nest on the strip of comb left as a bait. The sack or honey container is lowered to a waiting assistant below the nest. Sealed and unsealed honey comb are squeezed and filtered separately using fine mesh net and placed in containers. The leftover beeswax is sometimes brought home and used to preserve furniture but due to the distance away from the community and the perceived lesser monetary value of the wax, it is left in the forest. Sometimes other hunters choose to do the processing at home due to the inconvenience in the forest.

2. Ownership system of feral colonies

Gathering honey is regulated and follows strict traditional guidelines for identifying ownership, caring and technique for harvesting to ensure honeybees are not wiped out. Apparently, this is good because it gives order to every action the honey hunters has to take, however, this author's personal interview with honey collectors puts in question the commitment of the younger generation to abide in this age old tradition. It has been reported that marked bee trees (sign of ownership) is no longer respected and plundered for its honey to the detriment of the first person that found the nest.

3. Importance of *Apis Dorsata* honey to the local communities in Abra Province

Hunting *Apis dorsata* nest is a long traditional practice in the province. It has been a part of the seasonal cycles of activities amongst the communities. Renowned for nutrition and healing properties, honey is commonly sought as home remedy medicine not only for cough and common colds but to a variety of ailment including stomach problems. Honey from the Philippine national Narra tree (*Pterocarpus indicus*) is regarded as premium by the local inhabitants. Towards the end of the honey hunting season, a “honey with bitter after taste” presumably from a specific tree called “Adaway” in the vernacular is for keeping. The local folks attributes high pharmaceutical potency to this honey, this owing to the fact that the community is a day or two by foot to reach a local hospital, the road is described as beyond repair by residents. The honey consolidator (collector), who happens to be a volunteer in the community clinic recounted that rarely do patients are transported for treatment from the community. This story is far from fact but deserves some future study and scientific attention in the quest of truth as to honey's utmost relevance in the communal day to day life of Abra's mountain people.

Surplus honey is a cash crop that could be traded or bartered in exchange for grocery items or other basic necessities or even money to buy school uniforms and pay tuition fees when other source of income is not available. Most hunters are not marketing people so they rely on the services of honey consolidators (collectors). The collector consolidates the honey from various hunters at an agreed price or a promise to pay in the form of groceries once the honey is sold. This medium serves as the link between this author's organization (SLU-EISSIF) and the honey hunters. The SLU-EISSIF was not interested in the beginning with the honey from *Apis dorsata* because of the reasons enumerated earlier, its concern is to open additional income opportunity through the purchase of beeswax, which at the time of engagement about five years ago has minimal economic value in the community.

In the past, abandoned nests are hunted for beeswax and sold to candle and floor wax makers. But when honey started to command a higher price, beeswax gathering was discontinued to give preference to honey. Excess beeswax is thrown away, specifically in situation where honey needs to be squeezed in the field; beeswax is left in the forest as it pose an additional baggage to be carried. Since beekeeping with *Apis mellifera*

requires constant acquisition of new wax foundation sheets, SLU-EISSIF thought of the possibility to make use of beeswax from *Apis dorsata*. Suitable to good result and acceptance of *Apis mellifera*, a local demand is created for crude wax from the giant local honey bee, which is a prolific producer of this material. Optimistically, it could be stated that exploitation of the local specie is complementary to the sustainability of the introduced specie. It is of utmost relevance that programs relative to the appropriate management of this local specie be introduced to prevent the risk of further depleting this native resource and of further degrading its environment.

There are local government reports stating decrease in harvest and number of feral colonies due to excessive use of pesticide in mango plantation. This will affect negatively both actors; less honey for the honey hunter and less fruit sets to orchard owners because of lack of pollinators. On the contrary, there is one benefit resulting from decreased number of feral colonies according to one local government official, “the forests are protected from fire”. Honey hunters are not prohibited to gather honey but “lapat” ordinances on forest fires are enforced. “Lapat” is a century old system of regulating the use of natural resources among the upland tribes in Abra province. There are grave consequences for violators, as such; honey hunters are expected to be very careful in containing forest fires. The “smoker” built on forest floor is sometimes left unattended and has been identified as the cause of many forest fires. For this reason, local government officials do not give full support to honey hunting.

4. Honey processing and quality control

In most cases honey processing and “quality control” takes place at the household level. Processing and quality control is limited to the separation of honey from the honey comb then deposited in buckets before it is bottled utilizing recycled gin bottles. This is done by squeezing the honey comb placed in a fine mosquito or fish net. During this process some comb may contain brood (larva, egg, and pupa) that is eventually mixed altogether in the final product. This does not seem to pose problem at the local community level where honeybee brood is regarded as food of good nutrition. Typically the hunted *dorsata* honey is pure because of the remote tropical forest location it was collected from, it could be considered organic and free of additives. This combined with the honey's unique natural flavors, traditional harvesting methods, and its relevance as a non-timber forest product contributing to local livelihood, make this product highly marketable even if packaged in crude containers. This author opines that for the most part, salability is due to the lack of supply where honey is sold out before reaching the mainstream market.

5. End consumer perception about honey

Consumer perception about honey quality varies to a great extent. Purity is often associated to the kind of bees responsible for nectar collection. *Apis dorsata*, *Apis cerana* and *Trigona* as indigenous species are generally accepted as “wild bees” and their produce known as “wild honey”. Immediately, one gets a picture of genuineness, which at its very nature, should be readily acceptable. Due to the advent of “health and wellness shops” and the advocacy to go natural supported by private and government entities, the “wild honey” thing became an instant certified “organic product” via public perception. In the Cordillera region, “wild honey” fetch higher price (\$7/kg) than honey produced by the exotic bee *Apis mellifera*. The common argument is that bees in the wild are never disturbed by man except during honey collection; it's free from introduction of foreign materials necessary, as it is, in the care and maintenance of *Apis mellifera*.

However, there is now a growing impression that consumer confidence in “wild honey” is declining due to several factors most of which are well founded. A common

perception among customers is that honey is often adulterated with sugar syrup, which is added with pollen and beeswax to give the impression of authenticity. As mentioned earlier, honey is squeezed from the comb in the field or abode of the honey hunter and the difficulty involved in the course of collection brings to question the unsanitary handling (no hand washing) of the honey from the source and the appropriate selection of honey from the brood. Local people believed that the presence of crushed larvae (giving a cloudy appearance of the product), wax, pollen and pieces of dead bees is an assurance of authenticity (of course this is not true). This is aggravated by the typical high moisture content of *Apis dorsata* honey, which in the author's experience ranges from 24%-27% water. This is way above the acceptable standards. Let alone will lead to rapid fermentation and spoilage when stored at ambient temperatures. Some honey hunters and traders are well aware of this and have started to incorporate heating in their process before honey is bottled to stop the activity of the yeast. Though, it could be said that in general many do not know this fact and ascribe the bubbling effect of fermentation as honey's "living food" characteristic. In the market shelves, rarely one will find an appropriately labeled *Apis dorsata* honey except for the printed "wild honey or honey bee" sticker label placed on recycled bottle, there is no information as to floral source, place of origin, weight, volume, packer's information, etc.

Taken as a whole, the potential for *Apis dorsata* honey is huge especially in their "undisturbed natural habitat". Most of what seems to be attributes of poor quality is primarily because of the lack of education and proper training on the part of those involved in the honey marketing chain: the honey hunters, consolidators (collectors), traders, processors and even consumers. Secondly, too many projects have ignored existing local beekeeping or honey hunting skills, or worse, implied that they are wrong or out of date. This author believes that the development and preservation of the indigenous bees should be given a more permanent recognition by the national and local government. There was some sporadic attention in the past that was unsuccessful because they were anchored on different agendas. It is therefore imperative that support programs be created to close the gap between the current state of Philippine Cordillera honey (*Apis dorsata*) in relation to its national relevance as aid in food security through pollination and an indispensable element in the maintenance of biodiversity in the region's remaining forests. This, in anyway, will not diminish the impact of honey's relevance to the community as a source of nutrition, medicine and additional income.

References:

1. Narjes, M. (2009) An economic analysis of beekeeping and honey hunting as additional income alternatives for the rural poor in the Philippine Cordillera, Luzon, the Philippines
2. SLU-EISSIF Board of Trustees report, 2001
3. Bees and their role in forest livelihood (Bradbeer 2009, p18)
4. Anniban Family (February 2012) Bocloc, Abra, CAR, Philippines. (Benavidez, Edmund, Interviewer)
5. Food and Agriculture Organization of the United Nations (1990), Beekeeping in Asia
6. Department of Agriculture-Bureau of Agricultural Research (2011) The Philippine Beekeeping RD & E Agenda: A Roadmap for stakeholders 2011-2016
7. Bureau of Animal Industry, Director Nuestro represents DA Secretary Alcala in apiculture activities http://upittc.net/newbai/?page_id=605
8. Laigo, Ed (April 2011) Persistence of Indigenous practices, laws on forest management www.nordis.net
9. Naegel, L (1990) Potentials and problems in the development of beekeeping in the Philippines



Future for dorsata label



Introduced innovation EISSIF



Apis dorsata colony

NEW WEBSITE : WWW.NECTARBEES.NET

Last year NECTAR decided to look into the possibility to do something about the website. This has now been realized in the form of a new format. The layout has been modified and we are working hard on its content. Besides informing the reader about its own activities, more informative articles can be found about projects around the world, stressing about the importance of promoting beekeeping to institutes and organizations, being governmental or NGO.

However for technical reasons, the address had to be modified : instead of .nl it is now .net : www.nectarbees.net

INVITATION

Please inform us about your experience on tropical beekeeping. Your contribution is very much appreciated. NECTAR is very interested in learning from your activities related to tropical beekeeping. Your short report is valuable for other people. Please send us your information. We will gladly include this in the next edition of NECTAR NEWS. We also are grateful for your comments and suggestions.

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