Organic Beekeeping in Mexico

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Naturland in Mexico

members: 37 (equating to 12,862 small scale farmers)

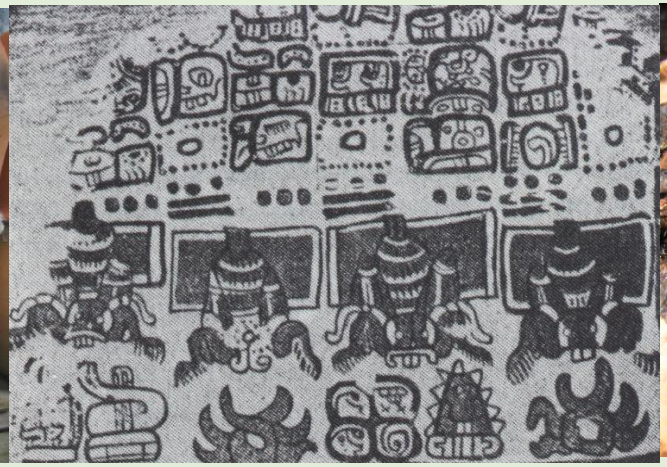
area: 40,062 ha (+ 48,600 ha wild grown)

products: coffee, honey, cacao, mango, banana, coco, allspice, agave



Stingless bee (meliponines)

- pre-hispanic Maya cultures produced honey from the native stingless bee (meliponines)
- today honey from native stingless bees is commercialized for medical purposes in local markets
- Spanish introduced European honey bee (*Apis mellifera* L).



Conventional honey production

Mexico

- ranks 6th in the world in honey production (57,000 t)
- ranks 3rd as an exporter (25,000 t)
- Germany buys 57% of the export

Mexican honey market

Mexico

- consumes 30,000 t per year
- 350g per capita consumption
- problems with adulteration (fructose)
- very little organic honey

Organic honey production

Mexico

- approx. 1,150 tons of organic certified honey, equating to about 5% of the Mexican honey export
- approx. 20 operators are certified organic
- most organic producers are cooperatives with small scale beekeepers
- more than 448 organic beekeepers (and 291 in transition)
- more than 46,318 organic hives (and 8,629 in transition)
- Yucatan, Campeche, Quintana Roo, Chiapas, Oaxaca, Morelos and Jalisco

Organic beekeeper, Campeche

Training course, Chiapas

Organic beekeepers, Oaxaca

Organic beekeeper, Quintana Roo

Development of organic beekeeping

- first cooperatives were certified in the 90's in Oaxaca y Guerrero state
- Naturland/ IMO organized the first organic beekeeping workshop in 2001
- since 2003 "El Colegio de la Frontera Sur" (ECOSUR) has offered annual courses with diplomas in organic beekeeping
- Naturland/ IMO trained the inspection agency Certimex on auditing organic beekeepers in 2004

Development of organic beekeeping

- 2005 “First Seminar of Organic Beekeeping” (Chetumal)
- 2008 “Forum of Organic Beekeeping” (Mérida)
- 2012 “World Conference on Organic Beekeeping”, organized by FiBL, Naturland and local partners

Contaminating substances

Antibiotics: Streptomycin, Sulfatiazol, Tetracycline, Chloramphenicol, Sulfonamid, Nitrofuran, Tetramycin,

Varroacides: Fluvalinat (Apistan), Flumetrin (Bayvarol), Coumaphos (Perizin)

Insecticides: Paradichlorobenzen (Naphthalin)

Conversion period

- **wax** sampling in order to ensure absence of conventional varroacides and paraffin
- if wax is contaminated it has to be replaced and the cycle of home-grown wax has to be established

Origen of the bees

- preference to local ecotypes
- Africanized honey bees entered Mexico in 1986 and now are established as the local race
- Africanized bees are pretty unselected, but with high productivity and high resistance to main diseases

Location of the apiaries

good conditions for organic honey production in Mexico:

- high diversity in ecosystems, crops, fauna and flora
- small scale agriculture and low use of pesticides, especially in the southern states with large indigenous cultures

Location of the apiaries

risks:

- high deforestation rate
- intensification of agriculture
- fields of GM soybean and GM maize

Material of hives

- basically of natural materials (wood)
- if necessary only external treatment (e.g. wax, linseed oil)
- problems with “water-based” colours without description

Feeding

- only if necessary for the healthy development of colonies
- critical climatic conditions: raining-season (summer)
- organic honey, from same unit

Good Production and Manufacture Practice

- required for exportation, especially for the European market
- extraction “en campo” includes: pavilion tents with plastic foil on the ground, food-grade materials, clean water, mask, hairnet

Good Production and Manufacture Practice

- filter and sedimentation facilities have to meet the strict hygienic standards of the Mexican Ministry of Agriculture SAGARPA- SENASICA
- this obligatory HACCP- style verification also includes a Honey Identification System with traceability logbooks

Internal Control System (ICS)

for small scale beekeepers in cooperatives

- internal regulation
- contracts
- qualified staff
- training courses
- documentation: beekeepers activities, maps, GPS, honey and wax account, traceability

NOMBRE DE LA COOPERATIVA: LOGO DE LA COOPERATIVA

CONTROL INTERNO DE APIARIOS PARA PRODUCCIÓN DE MIEL ORGÁNICA

COMUNIDAD_____

LISTA DE TRABAJOS EN UN APIARIO

NOMBRE Y CÓDIGO DEL PRODUCTOR	NOMBRE DEL APIARIO Y LOCALIZACIÓN	TIPO DE PLANTAS EN FLORACIÓN	CANTIDAD DE COLMENAS

FECHA	¿CUÁLES COLMENAS DEL APIARIO SE TRABAJARON?	TIPO DE TRABAJO REALIZADO: DIVISIÓN, COMPRA DE COLMENAS, NUEVA REINA, LIMPIEZA, ENVÍO DE CERA A ESTAMPAR, ETC.	PRODUCTOS UTILIZADOS QUÉ TIPO, ORIGEN DE LAS REINAS, CANTIDAD PARA CADA COLMENA

Fecha_____Firma_____

Thank you for your attention

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