An encyclopedic lexicon
of the Saho traditional knowledge on beekeeping

Moreno Vergari and Roberta Vergari - Ethnorêma

General information about the data

Beekeeping is one of the traditional productive activities for which the Saho population is well-known. Even though it is not practiced on a large scale, there still are several people who engage in honey production either for their personal consumption or for commercial purposes.

After independence Eritrea promoted a modernization policy of honey production techniques, with specific local training courses, but Saho beekeeping is still done mainly the traditional way. What an individual beekeeper knows about it generally derives from his personal experience, or from what his father taught him. Accordingly, this lexicon documents the traditional terminology and knowledge as they have been told us by our informants. No attempt is made to provide a scientific description of their beekeeping activities, even if what they said was plainly wrong, e.g., the belief of some of them that queen bees are males.

The data in this lexicon are provisional, in the sense that they result from the field work that has been done by till now, covering southern varieties of Northern Saho and the two main varieties of Central Saho. The next field trips in Eritrea by the team of the Atlas of the Traditional Material Culture of the Saho project will attempt to elicit data in villages where the other varieties of Saho are spoken.

1 The authors are grateful to their colleagues Giorgio Banti, Giovanni Dore and Axmadsacad Maxammad Cumar for their help during the different stages of the preparation of this article.
Field data have been collected in Eritrea from 1999 to 2009 by Moreno and Roberta Vergari (Ethnorêma). Interviews with the informants mentioned below have been carried out in January and February 2008 and 2009 by Ahmedsaad Mohammed Omer [Axmadsacad Maxammad Cumar] (Eritrean Field Coordinator), Giorgio Banti (University of Naples “L’Orientale”), Giovanni Dore (University of Venice “Ca’ Foscarì), Moreno Vergari and Roberta Vergari. The Ministry of Education of the State of Eritrea (MoE) generously provided the project with all the necessary authorizations and logistic support for visiting the towns and villages in the Southern (Debub) Region. The Saho Panel of the Department of General Education of the MoE supported us with their expertise.

**Documentary locations (field sites) and main informants**

Ciyaago and Safiira. Ciyaago is a small village very close to Safiira. Safiira is the main village on the 32 km² wide Qoxayto plateau, famous for its archaeological sites, its rock inscriptions and paintings. The interviews about beekeeping were carried out on the 28th and 29th January 2008, in the house and the apiary of the informant in Ciyaago. The beekeeping wordlist was recorded in Safiira the 1st February 2009.

Region: South [Zooba Debuub]
Sub-Zone (Province): Caddi Qayyix
Coordinates: 14°52′ N 39°25′ E (Safiira), 14°52′ N 39°24′50″ E (Ciyaago)
Altitude (approximative): 2630 m
Population: 272 (76 households) (Safiira)²
Main informant: Maxammadnur “Xajji” Axmad “Baska” (MN), a 62 year old beekeeper, of the Faqhat Xarak clan of the Minifire group of the Saho.

Kaaribossa. A village located 7 km. from Safiira (by car). The interviews on beekeeping were carried out on the 6th and 7th February 2008, in the house and the apiary of the informant. The beekeeping wordlist was recorded on the 3rd February 2009.

Region: South [Zooba Debuub]
Sub-Zone (Province): Caddi Qayyix
Coordinates: 14°55′ N 39°25′ E
Altitude (approximative): 2550 m
Population: 374 (80 households)³
Main informant: Maxammadcali Axmad Maxammad (MC), a 66 year old farmer and beekeeper, of the Xasabat Care group of the Saho.

Dhamxina. A village located 27 km. from Safiira (by car). The interviews on beekeeping were carried out the 26th January 2009, in the mosque of Dhamxina.

Region: South [Zooba Debuub]
Sub-Zone (Province): Caddi Qayyix

Coordinates: 15°01' N 39°26' E  
Altitude (approximative): 2550 m  
Population: not available  
Main informants: Maxmuud Ibrahim Aboobakar (MI) and Maxmuud Maxammad Ibrahim (MM), respectively 59 and 68 years old, herdsmen, farmers and beekeepers, of the Casaleesan clan of the Casawurta group of the Saho.

Thiisha. A village located a couple of km. northeast of Sancafe. The interviews on beekeeping were carried out on the 5th February 2008, in the house and the apiary of the informant.

Region: South [Zooba Debuub]  
Sub-Zone (Province): Sancafe  
Coordinates: 14°43' N 39°26' E  
Altitude (approximative): 2450 m  
Population: not available  
Main informant: Cumardiin Ibrahim Ismaacil (CI), a ca. 50 year old beekeeper of the Gacaso clan of the Minifire group of the Saho.

Mako. A village on the Amba Soyra plateau. The interviews on beekeeping were carried out on the 29th January 2009, in front of the house of the informant.

Region: South [Debuub]  
Sub-Zone (Province): Sancafe  
Coordinates: 14°42' N 39°31' E  
Altitude (approximative): 2720 m  
Population: 620 (127 households)  
Main informant: Xammad Adam Axmad (XA), an 81 year old farmer, herder and beekeeper of the Dabrimeela clan of the Saho.

Video and audio files

Short videos and audio files regarding beekeeping activities among the Saho are available in our website under the following links (see also the attached folder “Lexicon files”):

- Ciyaago_beekeeping.wmv
- Kaaribossa_beekeeping.wmv
- Thiisha_beekeeping.wmv
- chaachun_MC_KAA.mp3
- chaachun_MN_CIY.mp3
- saatsun_XA_MA.mp3
- tsatsun_CI_THI.mp3

4 Source: Administration office in Mako, 29.01.09.
Abbreviations and orthographical notes

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AB</td>
<td>'Afar schoolbooks (see Bibliography) related to related to</td>
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<tr>
<td>Af.</td>
<td>'Afar Reinisch 1890 (see the Bibliography)</td>
</tr>
<tr>
<td>Ar.</td>
<td>Arabic SB Saho schoolbooks (see the Bibliography)</td>
</tr>
<tr>
<td>cf</td>
<td>compare with sgiv singulative</td>
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<tr>
<td>CS</td>
<td>Northern and Southern SS Southern Saho (Xazo ~ Xado)</td>
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<tr>
<td>CS1</td>
<td>Northern Central Saho syn synonymous</td>
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<tr>
<td>Central Saho (Minifire) tr transitive</td>
<td></td>
</tr>
<tr>
<td>CS2</td>
<td>Southern Central Saho Ty. Tigrinya</td>
</tr>
<tr>
<td>(Southern Minifire - Dabromeela) UTSE Useful Trees and Shrubs of Eritrea - Bein et al. 1996 (see the Bibliography)</td>
<td></td>
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<tr>
<td>Diario</td>
<td>Mochi’s diary, (see Ciruzzi et al. in the Bibliography) vI first class verbs (verbs with prefixes and suffixes)</td>
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<tr>
<td>e.g.</td>
<td>for example vII second class verbs (verbs with suffixes)</td>
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<tr>
<td>f</td>
<td>feminine vIII third class verbs (stative verbs)</td>
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<tr>
<td>G. Ge'ez</td>
<td>vIV fourth class verbs (compound verbs)</td>
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<tr>
<td>intr</td>
<td>intransitive VV Vergari&amp;Vergari 2003 (see the Bibliography)</td>
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<tr>
<td>It. Italian</td>
<td>literally Bibliography</td>
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<tr>
<td>lit</td>
<td>literally</td>
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<tr>
<td>m</td>
<td>masculine ← variant</td>
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<tr>
<td>n</td>
<td>noun see</td>
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<tr>
<td>NS</td>
<td>Northern Saho (Casawurta – Thaaruuca – Xasabat Care}{ } likely etymologically related words in other languages</td>
</tr>
<tr>
<td>pl</td>
<td>plural</td>
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</table>

See also the abbreviations of the informants’ names in the sections about “Main informants” on the previous pages.

All the Saho and ‘Afar names are written with the current orthography used in Eritrea (except the names Saho [Saaho] and ‘Afar [Qafar]. Notice in particular that c = [tʃ], ch = [tʃ’], č = [tʃtʃ], dh = [d] and its allophone rh = [tʃ], gn = [ŋ], j = [dʒ], kh = [x], q = [k’], qh = [x’], sh = [ʃ], th = [t’], ts = [s’], x = [h].

5 Unless specified differently, Parker and Hayward (1985) and Parker (2006) have been used for ‘Afar; Wehr (1994) for Arabic; Leslau (1987) for Ge’ez; Kane (2000) for Tigrinya. Notice that etymologies are not indicated systematically here.
It is called p...queen bee; c'ina, nugus, reezanto, shuum.

(For information see under shuum).

amo nf 1. head 2. chief 3. top {Af. amo} pl amom ～ amum m.

— zizzaalet amo NS, CS1 ～ didaalet amo CS2 ～ dilaalet amo CS2, SS a bee’s head; also CS2 dilaalet xangal (CI).

On its head a bee [zizzaale ～] has its eyes [intit, pl of inti], its mouth [af] and its antennas [gawus ～ gashsha].

amoodasse nm bee pupa; pl amoodassit, m; cf dhanqacalla, xanane.

A phase in the development of bees [zizzaale ～], after the stage of larva [xanane ～]. When the bee reaches its 25th day of life (MN, MC), it is ready to get out of its cell [curum ～]. (According to CI the time for developing from larva to adult bee changes according to the climate.) An amoodasse has a black head and a white or yellow body (MC), and it is already a fully formed bee with its wings [gale ～] and its antennas [gashsha ～], but it cannot fly yet.

It is called puppa in SB 3.

are vII to bite {Af. are} rel to arnan biting, arriime ～ vI to be bitten, arriimeena nm someone who used to gnaw, to bite, arrishime 1. to cause to be bitten 2. to quarrel, arrite vI to be bitten, arro nf’bite, arum nm biting.
Bee [zizzaale →] bites, made with the sting [iko →] they have at the bottom [ceerho] of their abdomen, are regarded as poisonous. After biting, the bee dies because its sting remains in the victim’s skins together with a part of its abdomen [gabbe →]. Drones [canjur →] have no stings.

askhamar nm NS, CS1 ~ askamar CS2, SS fermentation {Ar. خمر [hamr]} rel to ikhmire NS, CS1 ~ ikmire CS2, SS to be fermented, iskhimire NS, CS1 ~ iskimire CS2, SS to cause fermentation (of a substance) (tr.), khamre NS, CS1 ~ kamre CS2, SS alcoholic drink.

Moslem Sahos prepare a beverage from milk [xan], water [lay] and, at times, buttermilk [xangazza →]. Yet they don’t let it ferment, and drink it before it develops an alcohol content. Cf bathce, birze, malab, mees, Xaliima macar.

balasa nm prickly pears(s), Indian fig(s) (Opuntia ficus-indica) {Ty. ِنَالَّا [bälās]} sg tv balasso m (fruit), balassō f.

A plant from which bees [zizzaale →] collect [eskette] nectar [dhacammucus →] and produce red honey [casa baska → baska]. (Opuntia ficus-indica. UTSE, 289)

baska nf honey; sg tv baskatto f NS ~ baskayto CS, SS; pl baskak m; rel to basaka nf sweetness, basak-erhexe ~ basak-e vIV to be sweet, basak-ishe to sweeten; cf bukke, inti, lanle.

— caaguyn baska yellow honey (from caaguyna vIII 'to be yellow').

Honey collected in May [gimbot].

— cado baska white honey (from cado vIII 'to be white').

Honey produced in September [maskarram] and October [thiqqimi]. A couple of days after being harvested it crystallizes. It is regarded as the best quality of honey.

— casa baska red honey (from casa vIII 'to be red').

Honey produced particularly from prickly pears [balasa →], collected in May [gimbot] and June [sayne]. Red honey remains liquid and doesn’t crystallize. It is believed to have particular curative virtues, and is used by non-Muslim Eritreans for producing mees [→]. Sometimes they add it to malab [→].

— dat baska black honey (from data vIII 'to be black').

Honey obtained from old honeycombs [ganra →].

— dhamxin baska honey that has been collected from some time, coagulated honey (from dhamxina vIII 'to be cold').

— intit baska pure honey, liquid honey (from inti nf'eye).
Also called simply inti [→]; cf lanie.

— lacin baska fresh honey, honey that has just been collected (from lacina vIII 'to be hot').
— musannac kin baska artificial honey (from musannac nm 'artificial thing').

Honey mixed with sugar [shokkar], bananas [banaana or muuz] or other things for commercial purposes. Saho’s do not produce it.

— tsideonat baska NS, CS1 ~ chideonat baska CS2 honey produced by mining bees [tsideon →].

This kind of honey is rather rare and difficult to harvest, because mining bees produce it underground. When it is collected [eskette], if fetches a very high price: the amount of a coffee [buun] cup can sell for 700 nakfas, ca. 35 euros at the exchange rate of February 2009. The area where it is produced lies to the west of Caddi Qayyix (Adi Keith), where mining bees are more frequent.

(Rein.)

baská plur. baskák subst. fem. honíq 1, 21; 2, 24; 8, 1.
dibbá baská wüstenhonig, Marc. 1, 6. ziidánu baská erdibien-honig, kaköyit baská >rabenhonig <name einer pflanzensorte, umomordica morkorra A. Rich., s. Bil. s. v. müró.

Bees don’t produce any honey from October to March. The first harvest is made in April [maaziya] and May [gimbot]. After August [naxass], during the highland rainy season [karma], all the honey has to be removed from the smaller beehives [qaffo →], in order to make room for the new honey that is produced abundantly in that period of time.

During the dry season [xaga] the little amount of honey that is produced is usually left in the honeycombs [samfe, xabaza →] for the bees. During particularly dry seasons the beekeeper [zizaalalet zan abatiya → zizaala] has to supplement the bees’ diet with a mixture of sugar and water, usually 1 kg. of sugar for 1 Lt. of water.

Honey is extracted from honeycombs by squeezing them after they are taken out of the hives [qaffo →] (see under xabaza for more details). Since what is thus obtained is rather impure, it is left in a container for some time. In this manner the wax [shimca →] gathers on the surface while liquid and purer honey [inti baska → baska] remains below it. However, this honey never is wholly pure. Sometimes a piece is cut off a honeycomb, and it is eaten in a mouthful [dhaclo NS, CS1 ~ daarooya CS2] of wax and honey.

Honey has different colours and qualities according to the plants from which it is produced. The main ones are: alaaki [→], cawun [→], gargeera [→], gaaxunrhe [→], gelgel mesgei [→], kusura [→], muzumwaaxe [→], qalaam Introins [→], saraw [→], tabab [→].

MC classifies the different qualities of honey according not only to their taste but also to the price they fetch with merchants: the best one is white honey (120 nakfa/kg = ca. 6 euro), then the red one (100 nakfa/kg = ca. 5 euro), the yellow one (80/90 nakfa/kg = 4/4.50 euro), the black one (60 nakfa/kg = ca. 3 euro), and finally the bukke [→] (40/50 nakfa/kg = 2/2.50 euro). The last one is generally not eaten by the Saho’s, who also don’t eat honey from plants such as siracceera [→], mazba [→], oalaal [→], sucuda [→] or timbaako [→].

The best areas in the Saho lands for honey production (according to MN) are Amba Soyra, Sarva, Dhaalo, Mudxulo, Dhamxina and Xaadlay.

botche nm NS, CS1 ~ batce CS2, SS 1. kneaded or mixed honey 2. fresh beverage prepared with honey and water, unfermented hydromel [Ar. botchha] [bit]; Ty. 0½½ [baṭe] to stir up, to muddy (water), to dissolve honey in water) rel to abthac nm NS, CS1 ~ abtac CS2, SS kneading, mixing the honey, ibthice vI NS, CS1 ~ ibtice CS2, SS to knead, to mix the honey, imbithice vI NS, CS1 ~ imbithice CS2, SS to be kneaded, to be mixed (of honey), iybithice vI NS, CS1 ~ iybithice CS2, SS to
cause to knead, to mix the honey, omboothooces vN, CS1 ~ ombotoocean. CS2, SS to be dirty with mud, to be soiled with mud; cf birze, malab, mees. Xaliima macar.

Bathc is usually prepared and drunk after a short while, before its fermentation [askhamar →]. It is used on special occasions such as weddings [marca] or religious ceremonies [tahlil]. The honey-water ratio is variable and depends on several factors as well as on the experience of the person (always a man) who is preparing the hydromel. It is served only to men by pouring it from a skin bag [drotta →] or another container. Sometimes the word bathce is used as a synonym of birze [→] or Xaliima macar [→].

(Rein.) Bata' 1 v. 1 in i (Af. bëtë, Ar. ᥏ mdb, Ti. ṭẖẖ; mit wasser ver-
dünner honig als getränk) honig ins wasser geben um ein
süsses getränk zu bereiten, subj. ab té', impf. d., pf. i-bëtë',
imprt. ðitë plur. ðitë und ðit'ël 38, 23, neg. mabta'tinl inf.
bëta', nom. act. abti'nà, subst. m. bëtë honiwasser.

y-bata' caus. ein solches getränk bereiten lassen, subj.
aybatë', pf. ðiybytë' imprt. ey, i-bëtë' u. s. w.

m-bata' pass., subj. ambatë', pf. ðambytë.

Birze nm NS, CS1 ~ birde CS2, SS unfermented or barely fermented beverage prepared with honey, water and (sometimes) buttermilk; hydromel; mead {Ty. ðiChl [barzi] or ðiCl [bärzi]} pl birzik in NS, CS1 ~ birdit CS2, SS; rel to i irize vN NS, CS1 ~ i iride CS2, SS to make something sour, to prepare birze, imbirrize vN NS, CS1 ~ imbirride CS2, SS to be made sour, iyibirze vN NS, CS1 ~ iyibiride CS2, SS to cause to become sour; cf bathc, malab, mees, Xaliima macar.

One or two days after it has been prepared bathce [→] begins to ferment [askhamar →]. Its fermentation is sped up by adding buttermilk [xangazza →]. Moslem Saho’s drink it before it develops an alcohol content. Sometimes birze is used as a synonym of bathce [→] or Xaliima macar [→].

Bukke nm bitter red/brown honey mixed with pollen, beebread; pl bukket mnr; sg tv bukketta fNS ~ bukkeyta CS, SS.

When bees [zizzaale →] deposit pollen [xawo →] in the cells [curum →], it forms with the honey [baska →] a semifluid mixture [cagun]. After some time this mixture becomes bukkke. Because of its bad taste, bukkke is generally left in the honeycomb [samfe, xabaza →] for the bees to feed on, especially during the dry season [xagaa]. When a beekeeper extracts honey from a honeycomb that contains also some bukkke, he usually puts it apart. It is either discarded, kept for the bees for dry periods, or sold on the marked if there is a considerable amount of it. Non-Moslems employ also this kind of honey for the fermentation [askhamar →] of mees [→] (XA). Saho’s don’t usually eat it. Some beekeepers maintain that bukkke is produced from the pollen of plants (e.g. mulxuxuna or xaxot) that cannot yield honey of good quality.

(Rein.) Bukk plur. buk-ìt, indiv. buk-ëtìa subst. m. (cf. bukkì) leera wachs-
scheibe in deran loehorn weder honig noch brut sich befindet.

Bulac nm small insect(s) that produces high quality honey; sg tv bulacto m; cf tsidea, uxun, ziiza.

It is found in tree holes or among rocks (MC).
cafur nm kind of lizard \{Af. cafur\} pl cafuura f.
One of the enemies [caduu] of bees [zizzaale \rightarrow] that can attack their hives [qafo \rightarrow]. MN believes that this lizard gets its poison [xinze \rightarrow] from the bees, and that snakes [caroora] gets their poison from it.

cako nf spider pl cakok m.
One of the enemies [caduu] of bees [zizzaale \rightarrow] that can attack their hives [qafo \rightarrow]. MN states that spiders construct their webs [thaqhar] inside hives and kill many bees.

canjur nm NS, CS \sim xunjur NS \sim candur SS, male bee(s), drone(s) \{Ty. dblæ-['anzara]\} sg tv canjurta m NS, CS \sim candurta SS.
Male bee [zizzaale \rightarrow], bigger than the worker bees [shaqqaala \rightarrow]. It doesn’t bite [are \rightarrow]. Bees kill the drones between the end of September [maskarram] and the beginnig of October [thiqqinti] at the maatot \[\rightarrow\] when the male bees return to the hives [qafo \rightarrow] (normally they go outside during the first afternoon [zuhre]). Drones are commonly believed by the Saho’s to fetch water (e.g. CI), but expert beekeepers know that this is not true and that their only function is reproduction.

(Rein.) Anur-arä plur. -it, indiv. anzará-ytö plur. -ytü subst. m. (Ty. khinc'f) drone, brutbine, bineumäńchen.

canqel nm syn of mascashala \[\rightarrow\] (CI).

caretto nf NS \sim carayto CS1, CS2, SS seasonal natural beehive; pl carettot m NS \sim caraytrot CS1, CS2, SS; rel to care nm house or cara nf place; cf gaxseena, murhoomse, mascashalä, qao.
This kind of natural beehives are found in hollow trees (sometimes also in holes made by a woodpecker [har-harat]) or in rock cavities, where bees [zizzaale \rightarrow] generally remain for one season. They are easy to reach, and bees frequently come back the following years.
Such hives can be spotted by looking for the bees’ faeces [thacal \rightarrow], or with the help of an indicator bird [irir \rightarrow].
In order to catch the swarm [cishle \rightarrow] of an caretto it is dislodged with some smoke [tika]. It then flees on a tree branch and the honey can be harvested from the hive. The swarm is shaken off from the branch and falls on a cloth or a bed sheet [ansoola o natsala]. Water is sprinkled on it for preventing the bees from flying away, and the queen [abba, ina, nugus, reezanto, shuum \rightarrow] is caught and closed in a special small cage [chaachun \rightarrow]. This chaachun is then put within a bundle of branches [mascashala \rightarrow] and the bees gather around it. At this point it is wrapped in a cloth with a piece of it sticking out for transporting it.
The beekeeper leaves a possession mark [tuumar \rightarrow] outside the beehive until he is able to carry the swarm away.
The corresponding term for CI is gaxseena \[\rightarrow\].

cawun nm species of plant(s) (Sarcostemma viminalare or Sarcostemma andongense) sg tv cawunto m (seed/flower), cawuntö f.
A plant from which bees collect [eskette] nectar [dhacammucus \rightarrow].

chaachun nm NS, CS1 \sim tsatsun CS2 \sim saatsun CS2 queen bee cage(s) \{Ty. ɐs-[sasän]\} sg tv chaachunto m
Queen cage made of split bamboo (Fougères, 1902)
NS, CS1 ~ tsatsunto CS2 ~ saatsunto CS2; pl chaachuuna f NS, CS1 ~ tsatsuunu CS2 ~ saatsuunu CS2.

A small cage use for transporting the queen bee [abba, ina, nugus, reezanto, shuum →] from one hive [qafo →] to another.

There are several types of chaachuun, some of them traditional and some modern. The traditional ones are of two types: one of them consists of a folded piece of leather (anada or rado) closed by removable small pieces of wood or thorns (usually from Acacia Abyssinica silica). These form a small cage of ca. 8 cm. (type A, see picture). Another traditional type consists of a segment of maize cane (ca. 12-13 cm. in length), with a number of holes for enabling the queen to breathe. The open end of the cane segment is closed by wooden plug (type B, see picture). One of the modern types consists in a small rectangular wooden box (ca. 13 cm. circa in length) closed by a wire netting. On one side it has a hole for introducing the queen bee, that is plugged with a wooden cap (type C, see picture). This type has been devised in order to improve the ventilation of the cage, and makes it possible to transport queens even in the hot lowlands or over long distances.

Other modern types are prepared according to the beekeeper’s whim (types D and E, see pictures).

The queen bee cannot be kept in a chaachuun for more than 8 days, before putting it together with its (old or new) swarm.

cishle nm NS, CS1, CS2 ~ cisle CS2 swarm, bee’s colony {Ty. ለስለ [aslä] or ለስሊ, [asli]} pl cishlit NS, CS1, CS2 ~ cislit CS2, m rel to icshile vl NS, CS1, CS2 ~ icsile CS2 to form a swarm (of insects), to swarm (intr). icsihile vl NS, CS1, CS2 ~ iscisile CS2 to collect a swarm in a specific place, issicishile vl NS, CS1, CS2 ~ issicissile CS2 to cause to collect a swarm in a specific place, mascashala [→], mascashalä [→]; cf dabaa, haadayto, xagaz, xawaz, zizzaaletta.

A swarm consists of the queen bee [abba, ina, nugus, reezanto, shuum →], the drones [canjur →] and the other bees [zizzaaile →].

There are both small [cindha cishle] and big swarms [naba cishle or dabaa → or xagaz →].

XA calls bokhre (a Tigrinya word: ለባ ተክ [bokr] ’eldest’) the first swarm that is born in a hive, daagim (a Tigrinya word: ደጋም [dägim] ‘wence, therefore, again’) the second one, and millax the following ones. Since a swarm ‘gives birth’ to other swarms, the originary one is also called ‘mother’ ina [→].

A general term used for bee swarms is ‘family’ xawaz [→], while zizzaaletta [→] is used as a synonym.

A swarm that is found and collected in the wild is called haadayto [→].
congoffe *nm* wax (MC), prickly pear skin; *pl congoffit m*; *cf* shimca.  
(For details see under shimca).

curum *nf* small hole(s); *sgtv curumto f, rel to curmuse vii* to do a hole.

A general term that is also used for the cells in a honeycomb [*samfe, xabaza →*]; *cf* inti.  
In SB 4 the cells are called *xashaakul*.

cuure *nf* alo(s) (*Aloe macrocarpa*) {Af. cadcuure; Ty. *zë* ['erä],  
*xe* ['ero], *dë* ['ärä]} *sgtv cuuretta m* (seed) *NS ~ cuureyta CS1,  
CS2, SS, cuurettä f* *NS ~ cuureytä CS1, CS2, SS*.  
A plant whose nectar [*dhacammucus →*] is harvested by bees.  

(Aloe macrocarpa. UTSE, 67)

dabaa *nm* big bee colony, big swarm; *cf* cishle, haadayto. xagaz. xawaz.  
zizzaaletta.  
A term used by MC as a synonym of xagaz [*→*].

dacmanur *nm* propolis.  
A dark mixture that is collected by bees [*zizzaale →*] and employed by them for closing  
the entrance [*maatot →*] of the beehive [*qafo →*], in order to shelter it against the winds  
and the enemies [*caduu*].  
CI states that it is collected by the drones [*canjür →*] and the worker bees [*shaqqala →*].  
MC instead believes that it may derive from wax [*shimca →*], while MN says it is a sort of  
pollen [*xawo →*].

Saho’s don’t use propolis, even though recent courses organized by the government have  
shown Eritrean beekeepers how it is used in other parts of the world.

dagge *nf* fence, enclosure, pen {Af. dagge} *pl daggeg m*.  

— cishli dagge *NS, CS1, CS2 ~ cishli dagge CS2* enclosure with beehives, apiary.

— zizzaalet dagge *NS, CS1 ~ didaalef dagge CS2 ~ dilaalef dagge CS2, SS* enclosure with beehives, apiary.

dhacammucus *nm* sugary fluid secreted by plants, nectar.  
Nectar is usually called just ‘water’ [*lay, laye*]. Bees [*zizzaale →*] suck it up from  
flowers and regurgitate it in the honeycomb [*samfe, xabaza →*]. CI specifies that it is the  
working bees [*shaqqala →*] who perform this job, whereas other informants believe that  
the drones [*canjür →*] do it. MN and XA don’t know any special term for the nectar  
collecting bees.

dhanqacalla *nf* pupa of the queen bee; *cf* amoodasse.
MC says that it is a stage in the development of a queen bee [abba, ina, nugus, reezanto, shuum →]. Its body is still white, and its wings [gale →] are not completely formed yet.

dhawrheena nm guard(s), watchman (-men); f’dhawrheenə; pl dhawrheenit m; rel to dhawrhе vII to take care, to keep, to guard, to defende, dhawrhte vII to take care, ecc., for one’s own benefit, dhawrho nf guard, difense; cf maxaarho, wardiya.

A general term used by some beekeepers for the guardian bees.

dhuurhe nf ant(s) {Af. dhuune} sgvt dhuurettα NS ~ dhurheytα CS, SS m; dhuurettά NS~dhurheytά CS, SS f.

One of the enemies [caduu] of bees [zizzaae →] that can attack their hives [qafo →].

folotta nf NS ~ foloitya CS, SS 1. piece of bread, food 2. honeycomb with honey;
sgtv of folo nf bread, food syn xabaza; cf ganra, lanle, lubud, samfe, sidda, takaro, xananepta.

The singulative form of the collective folo. It is used in beekeeping for indicating the honeycomb filled with honey, as a synonym of xabaza [→] (MI, MM).

gaaunxurhe nm plant of the family Acanthaceae.

A plant whose nectar [dhacammucus →] is harvested by bees [zizzaae →].

gabbe nm abdomen, lower part of the body.

This term is used only for bees [zizzaae →] and other insects [awwaaxa], e.g., flies [qaca].
Bees store in their gabbe the nectar [dhacammucus →] they collect from flowers (MN).

gadca var of gidac [→].

galadda nm wooden bowl {Af. galadda}
pl galaddit m; syn koora [→]; cf safxa, shaxan.

The galadda is a wooden bowl with a base [lak ‘foot/leg’] and one or two handles [cokkak ~ ayitit ‘ears’]. One of its uses is carrying the honey from the beehive [qafo →] to the home, where it is stored into another container.
Like all other wooden objects, the galadda is carved by men, preferably by using tamarisk wood [saagan]. Nowadays it is increasingly rare, as it is replaced by plastic or metal bowls.

gale nm wing {Af. gali} pl galil m.

A general term used for any kind of flying bird [kimbir] or insect [awwaaxa].
**gamad** *nm* lid {Af. gamad buttock, end, rear} *pl* gamud *m*.
A general term used in beekeeping also for the lids that seal the open ends of traditional hives [caadat qafo → qafo].
The gamad can be made of different materials, e.g., wood, animal dung, stones, etc.

**ganra** *nm* ~ garra old empty honeycomb(s), broodcomb(s) {G. ʿarrā [gərə]; Ty. γαρά [gama]}; *pl* ganrit ~ garrit *m*; *sgtv* ganrayto ~ garrayto *f*; cf. folotta, lanle, lubud, samfe, sidda, takaro, xabaza, xananeyta.
A ganra comb is an old and blackish broodcomb, that is usually discarded after the swarm has abandoned it. Even though it not a proper honeycomb [samfe, xabaza →], it may contain some honey [baska →]. At first this tends to be red, but it becomes darker after it has been used for several breeding cycles.
CI calls broodcombs xananeyta [→] generally, and ganra the old ones.

**gargeera** *nf*a kind of tree with white flowers (MN).
A plant whose nectar [dhacammucus →] is harvested by bees [zizzaale →].

**gashsha** *nm* NS, CS1 ~ gaysha CS2 ~ gysa SS horn {Af. gysa} *pl* gawus ~ gashshush *m* NS, CS1 ~ gayshush CS2.
A general term used in beekeeping for the antennas of bees [zizzaale →]. (XA).

**gaxseena** *nf* CS2 seasonal natural beehive; *pl* gaxseenit *m*; *rel to* gaxe *vl* to return; cf. caretto, murhcumse, qafo.
(For more details see under caretto).

**gelgel mesqel** *nm* herbaceous plant of the family of the Asteraceae (*Coreopsis macrantha; Bidens macroptera*) {Ty. ʿālā ʿālā ʿarbul [gäl gäl mâṣqāl]}.
A plant whose nectar [dhacammucus →] is harvested by bees (CI).

**gidac** *nm* ~ gadca animal dung, manure {Af. gudaace} *sgtv* gidacto ~ gadcayto *f*.
— gidacto ~ gadcayto beehive made with animal dung; cf. caadat qafo [→ qafo].

**gota** *nf* kind of tree(s); *sgtv* gotatto NS ~ gotayto CS, SS.
One of the trees whose trunks are used for carving out traditional wooden beehives [caadat qafo → qafo].

**haadayto** *nm* term used for indicating a swarm found and captured in the wild (XA); *rel to* haade *vl* to run away, to take away, to fly; cf. cishle.

**idrotta** *nf* NS ~ idrotya CS, SS water bag made with a goat or sheep skin; *pl* idrottit *NS* ~ idrotyit CS, SS, *m*; cf. sibbarh.
A water bag, slightly bigger than a sibbarh \(\rightarrow\), used for transporting several kinds of liquids and also honey \(\text{baska} \rightarrow\). (Now plastic \(\text{gomma}\) or metal containers \(\text{macdanto} \rightarrow\) are more frequently used to this purpose).

If an idrotta or sibbarh filled with honey are closed properly and stored in a box or suitcase \(\text{sanduqh}\), the honey can last even for 10 years (MN). After some time the honey in the bag solidifies, and in order to take it out it can be necessary to cut the bag that is then discarded.

Skin containers are prepared by women.

iko \(nf\) tooth; \(pl\) ikok \(m\).
— zizzaalet-iko (or simply iko) the sting of a bee.
(For details see under are).

ina \(nf\) mother \(\{Af.\ \text{ina}\} \ pl\) inon \(m\).
— zizzaalet ina NS, CS1 \(\sim\) didalet ina CS2 \(\sim\) dilalet ina CS2, SS queen bee; ‘mother swarm’; cf\(\text{abba, nugus, reezanto, shuum}\).
(For details see under shuum).

indacaaro \(mn\) species of fig tree(s) \(\text{Ficus vasta}\) \(\{Ty.\ \text{fic}\} [da\text{’}oro]\)
\(sgtv\) indacarto \(m\) (fruit), indacartō \(f\).

One of the trees whose trunks are used for carving out traditional wooden beehives \(\text{caadat qafo} \rightarrow\) qafo\).

inti \(nf\) eye \(\{Af.\ \text{inti}\} \ pl\) intit \(m\),
Saho’s call honey ‘eye’ when it is liquid and pure (see intit \(\text{baska} \rightarrow\) \(\text{baska}\)), especially when it is still in the cells \(\text{curum} \rightarrow\). Such cells are themselves called inti when they contain honey and before they are sealed with wax \(\text{shimca} \rightarrow\), because they have the shape of an eye. Liquid honey is also called lale or \(\text{lanle} \rightarrow\) (XA).

irir \(nf\) bird that guides humans to the nests of honey bees, honeyguide, indicator bird \(\text{Indicator indicator? Indicator minor?}\).

MC provided a detailed description of how this bird guides humans to a natural beehive \(\text{caretto} \rightarrow\). After spotting it and seeing a person, the \(\text{irir}\) lands on a tree near that person and utters its typical call for attracting his attention. The man answers by uttering ‘irriii’ when he recognises it. The \(\text{irir}\) then flies to another tree and utters again its call for guiding him. This sequence is repeated until the location of the bees is reached. The bird now utters a feebler call, flies a short stretch beyond the hive and then flies back, in order to show that the location has been reached. Sometimes it also lands on a tree near the bees \(\text{zizzaale} \rightarrow\), and flaps \(\text{gifgifite}\) its wings a couple of times against the tree. At this point the man collects the honey \(\text{baska} \rightarrow\) and the \(\text{irir}\) remains nearby in order to eat the larvae \(\text{xanane} \rightarrow\) that fall to the ground while it is being collected, or the honeycomb \(\text{samfe, xabaza} \rightarrow\) pieces that he leaves for it. If the person approached by the \(\text{irir}\) doesn’t collect the honey, it flies away looking for somebody else.

Usually it is men, not women, who recognise an \(\text{irir}\)’s call and collect the honey. This is also due to the fact that seasonal beehives are frequently located in rather inaccessible places.

MC also mentioned another bird, with black wings, called alago \(\text{Ty. \text{algo}}\) \(\rightarrow\), that indicates the presence of wild animals, snakes, and even bees.

(Rein.)
\(\text{irir}\) plur. -\(\text{a},\) indiv. \(\text{irir-ta}\) plur. -\(\text{tit}\) subst. m. vogel, bezeichnet nach seinem ruft \(\text{irir},\) den er stets hören lässt, der honigkukuk \(\rightarrow\), das war Bil. \(\text{firdrā}.\)
isqithire n°1 NS, CS1 ~ ihillile CS2, SS to buzz; to swarm around the beehive, making noise.

koora n° wooden bowl; pl/koorar m; syn galadda [→] cf/safxa, shaxan.
(For more details see under galadda).

kusura nm jujube (Ziziphus spina-christi) {Af. kusra} sg d kusurto m (seed/fruit), kusurtò f.
A plant whose nectar [dhacammucus →] is harvested by bees [zizzaale →].

lanle n° ~ lalle 1. pure honey, liquid honey (XA) 2. the honeycomb when it has been removed from the hive, before the extraction of its honey (MI, MM); cf 1. inti, intìt baska [→ baska] 2. folotta, ganra, lubud, samfe, sidda, takaro, xabaza, xananeyta.

lashshab n° NS, CS1 ~ layshab CS2 ~ laysab SS bat (animal); pl/lashshaabub m NS, CS1 ~ layshshaabub CS2 ~ laysaabub SS; sg d lashshabto NS, CS1 ~ layshabto CS2 ~ laysabto SS.
Bats are regarded as one of the enemies [caduu] of bees, that they eat.

lubud nm closed/completed/finished thing {Ty. Afl. : [labud] blocked, plugged up} rel to ilbide v° to close, to complete, to finish; to put the traditional millstone on its support.
The term lubud kin xabaza ‘closed honeycomb’, or simply lubud, is used for honeycombs that have been sealed by bees with wax after they have been filled with honey [baska →] cf/folotta, ganra, lanle, samfe, sidda, takaro, xabaza, xananeyta.

maatot nm small entrance in a beehive used by bees for getting in and out of it; pl/maatooti, f.
This rather small hole (a few cms.) is made by the beekeeper with the help of a sharp pointed metal tool [mandal] and a hammer [martello].

macdanto nm container with a lid, made of tin or another metal; pl/macandtiti, m.
Container also used for preserving and transporting honey [baska →].

malab nm fermented beverage, ‘beer’; pl/malab m {Af. malab honey} cf/bathce, birze, mees. Xaliima macar.
MC says that non-Muslims sometimes add red honey [casa baska → baska] to malab [→]. Today the most of the Sahos use the word malab for indicating the traditional beer suwaa.

(Rein.)  Malab plur. malab subst. m. (‘Af. So. id.) honig mit wasser ver- mengt, honigwasser zum trinken; die christlichen Saho (Irob) nennen so auch die morisa, das bier von der negerhirse wenn sie in dasselbe etwas honig geben 8, 22, 25; 270, 2 ff.; 278, 22; 979, 13. 19 u. a.
mascashala nm NS, CS1 ~ mascasala CS2 bundle of branches used to capture and transport a swarm {Ty. ṣmflh, [mā’sāli]} pl mascashalit m; rel to cishle [→].

A mascashala is usually made of alaaki [→] branches. CI calls it canqel [→]. For further informations see caretto.

mascashalā nf NS, CS1 ~ mascasalā CS2 traditional beehive (of different kinds) {Ty. ṣmflh, [mā’sāli]} pl mascashalit m; rel to cishle [→]; cf qafo.

CI says that it is a hive placed by a beekeeper in a remote area, in order to entice bees [zissaale →] to settle in it.

maxaarho nm 1. troop, army, warriors 2. spear {Af. maxarhu} pl maxaarhit m; cf dhawrheena, wardiya.

CI calls maxaarho (or casaakir ‘soldiers’) both the guardian bees [wardiya →] and the workers [shaqqaala →], especially when they are inside the beehive [qafo →].

mazba nf NS, CS1 ~ madba CS2, SS specie(s) of euphorbia (Euphorbia polyacantha) {Ty. ṣmfl [māzb]a} sgvt mazbatto m NS ~ mazbayto CS1 ~ maddbayto CS2, SS (seed/fruit), mazbatō f. NS ~ mazbaytō CS1 ~ maddbaytō CS2, SS.

Plant from which bees [zissaale →] produce a low quality of honey [baska →] that is not consumed by the Saho’s (MN).

(Euphorbia polyacantha. UTSE, 201)

mees nm fermented beverage made with honey, water and geeso (Rhamnus prinoides), hydromel, mead, honey wine {Ty. ṣm [mes]}; cf bathce, birze, malab, Xallima macar.

(Rein.) Ḍes plur. -ā subst. m. Ti. (s. Bil. nd f) honigwein, hydromel 6, 19 f; 7, 1 ff.; A. mlē.

murhcumse nm ~ murhcunse permanent natural beehive; pl murhcumsit ~ murhcunsit, m; cf caretto, gaxseena, qafo.

Natural beehives of this kind are generally to be found in rock cavities [galba] and in inaccessible locations such as sheer cliffs [bol]. Bees [zissaale →] live permanently in such hives, even for long periods of time (10, 20 years or more).

For reaching them, one has to use ropes for climbing down, and the following procedure is used. At first, the entrance of the beehive is smoked and sealed with stones and small branches. Bees must not be allowed to get out of it. The entrance remains sealed for two or three days, while the bees eat the honey [baska →] they have. After this time has elapsed, the hive is opened and smoked again. The swarm is so hungry, thirsty and disturbed by the smoke [tika] that it exits the hive and gathers on a nearby branch. At this point it is captured with the same method that is used for a caretto [→].

muxumwaaxe nm ~ muxunwaaxe herbaceous plant with white flowers (Phaulopsis imbricata); sgvt muxumwaaxettā f NS ~ muxumwaaxeytā CS, SS; syn of waxamwaaxe [→].

A plant whose nectar [dhacammucus →] is harvested by bees [zissaale →]. The Tigrinya call it ṣtł.p [gurbiya] or ṣtł.p [gurbiya].
nugus *nm* king {Ty. ṭër’m [nəguš]} *pl* nugusa *f.*

— *dilaulet nugus* SS queen bee (XA); *cf* abba, ina, reezanto, shuum.

oolac *nm* olive tree(s), African wild olive (*Olea africana, Olea chrysophylla*) sgtv oolacto *m* (seed, fruit), ooolactō *f.*

Branches of wild olive trees are used for producing the smoke [tika] needed by beekeepers when they want to operate within a hive [qafo]. Their smoke is believed not to harm the bees [zizzaale]. *Cf* waybo,zagaxo.

*Olea africana.* UTSE, 285

oolal *nm* specie(s) of euphorbia (*Euphorbia abyssinica*); sgtv olalto *m* (seed/fruit), oolaltō *f.*

Plant from which bees [zizzaale] produce a low quality of honey [baska] that is not consumed by the Saho’s.

*Euphorbia abyssinica.* UTSE, 199

qafo *nf NS, CS1, CS2 ~ kafo* CS2, SS 1. beehive 2. large container made of clay and animal dung used as granary, normally place in traditional houses [naxsa] also for dividing a room {Ty. ḥe [qofo] or ṭe [qʷáfo] or ṭe [qāfo]} *pl* qafōf, *m* *cf* caretto, gaxseena, gidacto, murhcumse, mascashalā.

— *caadat qafo* traditional beehive made of animal dung or of a carved tree trunk.

Beehives made of animal dung are also called gidacto ~ gadcayto; cow, goat or sheep dung [gidac] is used to this purpose. They are usually prepared by women, who use dung they collect during the rainy season, when there is more grass and the animals produce it more abundantly.

PREPARATION: First of all the dung is mixed with ashes [gomboz], red earth [casa buure], barley straw [cadeelaw xasar], dry grass [kafin cashsho] and some water. The hive is built vertically by placing successive layers of this mixture upon each other, so as to form a sort of cylinder, ca. 100-150 cm. in length, with bottom and top openings of ca. 25-30 cm. After laying one layer it is left to dry before laying the following ones. While building the hive and letting it dry up, it is usually kept on the roof of a naxsa, the traditional dwelling of the Saho’s in the highlands, so as to prevent animals from damaging it [see picture]. The whole procedure lasts ca. 15-20 days. After building the main body of the hive, the two lateral round lids are prepared, with animal dung or flat stones (that are later sealed with animal dung). A small hole [maatot] is also made at the center of the long side of the hive, as an entrance for the bees. After laying it in a horizontal
position in the apiary, it is protected from atmospheric agents – or other accidental causes of damage to its structure – by means of different layers of rags covered by flat stones or corrugated zinc sheets. (In the past old skin carpets were also used to this purpose). Some beekeepers cover the upper stones with a layer of earth like the roofs of the naxsa’s. This kind of beehive is regarded as the best one for the bees, that may also consume some of the animal dung, but it doesn’t last more than 6 or 7 years, even if it is well protected.

Traditional wooden hives are built by carving pieces of tree trunks, preferably from sycomores or similar trees, because they provide a higher inner temperature. The trunk is cut with an axe or a saw into a piece of the length of three cubits, i.e., ca. 150 cms. It is then shaped by means of a large chisel in its inner and outer sides, practicing two lateral openings. An awl is then used for opening a lateral hole that the bees will use as their door, when going to harvest pollen and coming back. Even though these hives are much more resistant than the animal dung ones, they are provided with protective coverings of different kinds. These two traditional hives may yield up to 30 kg. of honey.

«I see here [in Mako] for the first time some beehives obtained from cylindrical tree trunks, by carving them out and giving them a tubular shape, whose two openings are closed by two tiles made of animal dung and earth. At the middle of the cylinder there is a hole allowing bees to enter. The wooden cylinder is placed horizontally on a heap of stones, and covered with pieces of tree bark.» (Aldobrandino Mochi - Translated from Diario, pag. 121).
— xokomat qafo modern beehives with removable frames (*lit* 'government hive').

The Eritrean government has organised several courses for beekeepers and provided them with modern hives with removable frames [see picture]. These are frequently used together with the traditional ones. However, some people still prefer the old system, both because it yields higher amounts of honey (a modern hive may contain not more than 10 - 20 kg. of honey), and because bees seem to prefer the traditional qafo, especially those made of cow dung.

A plant whose nectar [dhacammucus →] is harvested by bees [zizzaale →].

**rezanto** nm **NS**, **CS1** ~ **reedanto** **CS2**, **SS** chief, leader {Af. reedantu} pl **rezon** m **NS**, **CS1** ~ **recon** **CS2**, **SS**, rel to **reze** vII to be proud, to get a position of power, **reeceena/ä** nm proud person (male/female), **reezishe** vII to cause to be proud, to give a position of power.

— zizzaale rezanto **NS**, **CS** ~ dissaleet reedanto **SS** ~ dilaleet reedanto **SS**

queen bee [ape regina] cf **abba**, **ina**, **nugus**, **shuum**.

For further informations see **shuum**.

**safxa** nf large plate, platter {Ar. صفحة [ṣafḥa] surface, page, sheet, or صفيح [ṣaffīḥ] surface, metal sheet or plate; Ty. شفاف [ṣaffāf] flat, level, plane, or شفاف [ṣaffāf] broad, wide, of big dimension} pl **safaaxi**, m cf **galadda**, **koora**, **shaxan**.

Normally used to serve the **thaabita** - a kind of bread - it is also used for carrying the honey [baska →] from the beehive [qafo →] to the house, where it is put into another container.

**samfe** nm ~ **sanfe** new empty honeycomb(s) {Ty. سف [ṣafa]} pl **samfit** ~ **sanfit**, m; sgtv **samfetta** ~ **sanfetta** **NS** ~ **samfeyta** ~ **sanfeyta** **CS**, **SS** f; cf **folotta**, **ganra**, **lanle**, **lubud**, **sidda**, **takaro**, **xabaza**, **xananeyta**.
The honeycomb is built by the bees. But if a beekeeper wants to have a new colony in one of his hives [qafo \(\rightarrow\)] he positions in it a piece of a honeycomb – empty or containing some honey [xabaza \(\rightarrow\)] – supporting it by means of Y-shaped sticks. This new comb is called takaro \(\rightarrow\). It makes it easier for the bees to build the remaining part of the new comb. XA points out that the Dabrineela say sidda rather than samfe.

**sarah**

\(\text{nm specie(s) of acacia (Acacia etbaica)}\) \{Ty. \(\nu \cdot \lambda \cdot \rho \cdot \tau \cdot \zeta\) [sāraw]\}

\(\text{sgtv sarawto m (seed/fruit), sarawō f.}\)

A plant whose nectar [dhacammucus \(\rightarrow\)] is harvested by bees [zizzaale \(\rightarrow\)]

(Acacia etbaica. UTSE, 21)

**saxdad**

\(\text{nm catlike animal(s), genet (Genetta Abyssinica)}\); sgtv saxaddō m, saxaddō f.

One of the enemies [caduu] of bees [zizzaale \(\rightarrow\)] that can attack their hives [qafo \(\rightarrow\)].

**shaqqaala**

\(\text{nf NS, CS1 \sim CS2, SS sakkaala worker(s)}\) \{Ar. شَغْاَلَ [ṣāggāla]; Ty. \(\ddash \ddash \ddash\) \(\ddash \ddash\) [ṣāqqāli] or \(\ddash \ddash \ddash\) \(\ddash \ddash\) [ṣāqqalay]\} sgtv shaqqalattō m NS \sim shaqqalaayto CS1 \sim sakkaalayto CS2, rel to shuqle \(\text{nm NS, CS1 \sim sukke CS2, SS work, job, ushtuqhule vi NS, CS1 \sim ustukule CS2, SS to serve, to work, uyshuqhule vii NS, CS1 \sim uysukule CS2, SS to cause to serve, to cause to serve, to employ.}\)

MC uses this word for the worker bees, i.e., for those that harvest food. But there is an obvious influence of the new official terminology, different from the traditional one that generally distinguishes only the queen bees and the drones from the other bees.

In \(SB\ 2\ e\ SB\ 3\) the worker bees are called kaddaam \(\sim\) khaddaam, an Arabic loanword meaning ‘worker, servant’.

**shaxan**

\(\text{nm NS, CS1 \sim saxon CS2, SS dish, plate}\) \{Af. saxni; Ar. صحن [ṣāhn]; Ty. \(\ddash \ddash\) \(\ddash \ddash\) [ṣāhan] or \(\ddash \ddash\) \(\ddash \ddash\) [ṣāhani] or \(\ddash \ddash\) \(\ddash \ddash\) [ṣāhani], etc.\} pl shaxun m NS, CS1 \sim saxun CS2, SS; cf galadda, koora, safxa.

A usually metallic container that can be also used for carrying the honey [baska \(\rightarrow\)] from the beehive [qafo \(\rightarrow\)] to the house, where it is stored in another container.

**shimca**

\(\text{nf NS, CS1 \sim shimce ~ chimce ~ simca CS2, SS wax, candle(s),}\) \{Af. samci; Ar. شَمْصَة [ṣam’ah] or شَمْص [ṣam], etc.; Ty. \(\ddash \ddash\) \(\ddash \ddash\) [ṣām’i] or \(\ddash \ddash\) \(\ddash \ddash\) [ṣām’i]; \(\ddash \ddash\) \(\ddash \ddash\) [ṣām’a] or \(\ddash \ddash\) \(\ddash \ddash\) [ṣām’a]\} sgtv shimcatto m NS \sim shimcayto CS1 \sim simcayto CS2, SS; cf congoffe.

Wax is produced by bees [zizzaale \(\rightarrow\)] for building honeycombs [samfe, xabaza \(\rightarrow\)]. Some people believe that they produce it from pollen [xawo \(\rightarrow\)].

Usually the Saho don’t use the wax that remains after the honey [baska \(\rightarrow\)] has been taken out, and discard it. Other groups use it for the traditional candles [thuwaaf, from Tigrinya ṭawaf], obtained by soaking a strip of cloth in wax. Some Saho’s use wax instead as a cleanser [mafaawaza] and lubricant of the gasa, the clay (or iron) griddle employed for cooking thaabita, a pancake-like bread.

Look under baska and xabaza for how wax is separated from honey.

**shuum**

\(\text{nm NS, CS \sim suum SS chief, leader}\) \{Af. suum (AB I); Ty. \(\ddash \ddash\) \(\ddash \ddash\) [šum]\} pl shuuma fNS, CS \sim suuma SS \sim shuumom m NS, CS \sim suumom SS.
— zizzaalet shuum NS, CS I ~ didalet shuum CS II ~ dilaalet shuum CS II, SS queen bee; cf abba, ina, nugus, reezanto.

MN says that many people call abba [→] ‘father’ the queen bee, even though it should rather be called ina [→] ‘mother’ because it is a female. CI states that the queen bee is a male that injects its semen [shahwa] into the honeycomb [samfe, xabaza →]. However, he is aware that the queen bee also lays [CI used irhiggle ‘to milk’] eggs [ubub →], but maintains that it is able to do this even though it is a male. XA — who calls the queen bee nugus [→] ‘king’ — says instead that it is not possible to distinguish male from female bees, but adds that his people regard the queen bee as a male and the broodcomb [ganra →] as a female. According to MC it is the queen bee who builds it ‘home’ in the honeycomb [xabaza →]. It is easy to distinguish from the other ones because it is bigger and has a projection that looks like a nipple. According to CI the queen bee organizes all the work that is made by the colony [cishle →].

(Rein.) ḏīdalā šām die bineakönigin,

sibbarh nm water bag made with a goat or sheep skin, normally used as a churn for preparing butter, smaller than idrotta; pl sibborh m; cf idrotta.

sidda nf name used for samfe [→] among the Dabrimeela (XA).

siraaceera nf kind of aloe (from siraa ‘poison’ and ceera ‘aloe’ {Ty. ȍo- [‘arā] or ṣe [‘erā]. In Soho normally cuure}) sgtv siraacerto f.

Plant (also simply ceera) from which bees [zizzaale →] produce a low quality of honey [baska →] that is not consumed by the Soho’s.

subula nm sycamore fig(s) (Ficus sycomorus) {Af. subla} sgtv subultó f.

One of the trees whose trunks are used for carving out traditional wooden beehives [caadat qafo → qafo].

(Ficus sycomorus. UTSE, 213)

sucuda nm very leaf evergreen bush (Adhatoda schimperiana) {Ty. ǹo-à [sô’uda]}

sgtv sucuddo f.

Plant from which bees [zizzaale →] produce a low quality of honey [baska →] that is not consumed by the Soho’s.

tabab nm aromatic plant(s) (Becium grandiflorum; Ocimum filamentosum) {Ty. ṱffṱl [tābāb]} sgtv tababto m (seed/fruit), tababtô f.

A plant whose nectar [dhacammucus →] is harvested by bees [zizzaale →].

(Becium grandiflorum. UTSE, 85)

takaro nf 1. hanging, suspending 2. name of the new honeycomb hanged in the beehive {Af. takar} pl takaror m; rel to takarë vIi to hang, to suspend; cf folotta, ganra, lanle, lubud, samfe, sidda, xabaza, xananeyta.

(For more details see under samfe).
It is not necessary to place a mark near a permanent natural hive. This mark consists in a small leafy branch with a stone over it. It is left where a seasonal hive has already been found and its swarm will be carried away by its legitimate owner.

Thacal nm NS, CS1 ~ tacal CS2, SS faeces of the bees; sg tv thacal to m NS, CS1 ~ tacal to CS2, SS.

According to MC the colour of the bee faeces changes according to the honey they produce: they are white if it is white, red if it is red, etc.

Natural bee hives [careto →] can be spotted also by looking for the bee faeces.

timbaako nf tobacco (Nicotiana tabacum); Af. timmaako; Ar. تنبك [tumbāk]; Ty. نك [tomba] or نك [tomba] sg tv timbaakotta f NS ~ timbaakoyta CS2, SS.

Plant from which bees [zizzaale →] produce a low quality of honey [baska →] that is not consumed by the Saho’s.

tsdeena nf NS, CS1 ~ chideena CS2 mining bee, soil-dwelling bee, digger bee (Andrena sp.); Ty. زادين [ṣadānay] or زادن [ṣadena] or زادن [ṣadānay]; pl tsdeenit m NS, CS1 ~ chideenit CS2; cf bulac, uxun, zizaa, zizzaale.

(For details about the honey produced by this insect see tsdeenat Baska under Baska).

(t) Chideen plur. -it subst. m. (s. Bil. s. v.) die erdbine, A. مَلْعَبَة
genna, نتبت busita erdbinehong.

tuumar nm ~ toomar mark, sign, signal, note, identifying message, indication; Ty. تمار [ṭa’marti]; rel to tuummare ~ toomare VII to make a sign, to mark; tuumaaarime ~ toomarime VII to be marked, to be indicated.

This mark consists in a small leafy branch with a stone over it. It is left where a seasonal natural beehive [careto →] has been found. It indicates to other people that the hive has already been found and its swarm will be carried away by its legitimate owner.

It is not necessary to place a mark near a permanent natural hive [murhcumse →], because the bees never leave it for ever.

Ubub nm egg(s) (biology), larvae of insects {Ty. ابوب [abbub] or ابوب [abbub] fly larvae, maggot} sg tv ububta m; cf amoodasse, xanane.

Beekeepers have different opinions about how bees [zizzaale →] have their offspring [emxeerese ‘to reproduce’] and about their life cycle [rooxi maklalo in SB 3], from when their eggs (called by CI and XA also with the generic term lalim) are laid to when the stage of adult insects is reached.

According to MN the eggs are laid in the broodcomb [ganra →] by the queen bee, that he calls shuum (yet see also abba, ina, nugus, reezanto). The bees feed the eggs with droplets of a white substance, and keep the eggs warm by closing the cells [curum →] with wax [shimca →]. The eggs grow inside this white fluid. After three days, if the queen bee is removed from
the colony [cishle →] the egg that has been fed in a special way for becoming a queen will
develop into a queen bee. If the queen dies, the egg develops into a drone [canjur →]. The
other thousands of eggs become ordinary bees.

Three days after they have been laid the eggs start to bend, but later they stretch out
lengthwise. On the 15th day it is possible to recognize their heads. Larvae are called
xanane [→] at this stage. The Saho’s sometimes eat xanane larvae because they regard
them as a medicine against malaria and other diseases. XA points out that when the larvae
still have a bent position they are called gurah gaxe xanane (lit. ‘leftwards bent
xanane’).

After 25 days the bee is fully formed, with its black head and its wings, but it cannot fly yet.
At this stage it is called amoodasse [→], and it is ready for getting out of the honeycomb.
After ca. 30 days the bee has reached its full maturity and is able to fly.

According to MC and CI there is no difference between ubub and xanane, whereas
according to XA the stage of ubub lasts ca. 4-5 days. MC claims that drones, although they
are regarded as males, generate their own xanane, called canjur xanane. Also the queen
bee generates a xanane that will become a queen, inside a special ‘house’ that is built for it
within the honeycomb [xabaza] and that is easy to recognize (for further details see
shuum). Bees reproduce when there is a suitable weather, with enough rainfall and,
consequently, plenty of nourishment for them.

On the other hand, CI and XA say that bees mature [igmirhe] in ca. 15 days, but that this
period can change according to the weather. In cold areas it can take 20-25 days for bees to
reach maturity.

Climate can also ‘burn’ [xararishe ‘cause to burn’] the larvae, especially misty weather
[awaa or budbud] that prevents the sunbeams to reach the ground.

According to MC normal bees live ca. 5-6 months, whereas a queen bee may even live for
5-6 years.

uxun nm wasp(s); sgtv uxunta ~ xuunta m; cf bulac, tsidea, ziiza, zissaale.

An insect that produces honey [baska →], that is different from what is produced by
zissaale [→].

wardiya nf guard(s), watchman(-men) {It. guardia; Ty. Pg, Fr [wardiya]} sgtv
wardiyatto m NS ~ wardiyato CS, SS; wardiyattō f NS ~ wardiyatō CS, SS;
cf dhawrneheen, maxaarho.

A general term used by some beekeepers for the guardian bees.

waxamwaaxe nm ~ waxanwaaxe herbaceous plant with white flowers
(Phaulopsis imbricata); syn of muxumwaaxe [→].

(For more details see under muxumwaaxe).

waybo nf type of tree(s) (Terminalia brownii) {Af. waybu; Ty. Avg [wāyba]} sgtv
wayboytä m (seme/frutto), wayboytä f.

Branches of this tree are used for producing the smoke [tika] needed by
beekeepers for operating inside a hive [qafo →]. Cf foolac, zagaxo.

(Terminalia brownii. UTSE, 385)

xabaza nf SS, CS1 ~ xabada CS2, SS 1. type of bread 2. honeycomb that contains
honey {Af. xabda bread} sgtv xabazatto m NS ~ xabazayto CS1 ~ xabadayto
CS2, SS, pl xabuz m NS, CS1 ~ xabud CS2, SS; cf folotta, ganra, lanle,
lubud, samfe, sidda, takaro, xananeyta.
The empty comb [samfe →] becomes a xabaza after it has been filled with honey or eggs [ubub →]. This name is connected to a type of bread because of its shape and because it serves as food (cf. folotta). When the cells [curum →] are closed the honeycomb is called lubud [→], while after it has been used as a broodcomb it is usually called ganra [→].

For collecting the honey the comb has to be removed from the hive [qafo →].

Approximately one third of it is cut out [zage →] from one of the two lateral openings, and another third from the opposite opening. Its central part is left inside the hive for the bees. (See baska and shimca for further details about how honey is extracted and separated from wax).

(Rein.) Habaddâ, habâdû, habâzâ plur. hābud subst. fem. (Af. id., s. d.)
1) eine sorte von brod in form einer runden, dünnen scheibe.
2) honigwabe, so benannt nach der form des oben beschriebenen brodes.

xagaz nm NS, CS1 ~ xagad CS2, SS big bee colony, big swarm; cf. cishle, dabaa, haadayto, xawaz, zizzaaletta.

A term used as a synonym of dabaa [→].

Xaliima macar nf (lit. ‘Halima’s honey’ with the Tigrinya word macar = Ty. ṣmâq [mâ`ar] or ṣmâq [mâ`ar] honey) hydromel, mead; cf. bathce, birze, malab, mees.

Sometimes used as a synonym of birze [→] or bathce [→].

The entry in Reinisch’s dictionary hints at a folk-etymological change from xaliib into Xaliima.

(Rein.) Halîb plural. -â subst. m. (Ti. G. ḏALîb, ḏâlîb, ḏalîb 甜甜 ḏâlîb ḏâlîb ḏâlîb ḏâlîb laic, success) honiggen, reichliches erträgniss von honig 24, 6.

halîbû-ма’âr getränke aus milch und honig (G. ṣmâq [mâ`ar]) bereitet, honig in milch aufgelöst 253, 10, 15.

xanane nm bee larva; sg tv xananetta m NS ~ xananeyta CS, SS; rel to ixinnine
vl to generate, to initiate, ixinnine vl to be generated, to be initiated; cf. amoodasse, dhanqacalla, ubub.

A phase in the development of bees [zizzaale →], after the stage of eggs [ubub →].

It is called larva in SB 3. For further details about life cycle of bees see under ubub.

xananeyta nf broodcomb (CI); cf. folotta, ganra, lanle, lubud, samfe, sidda, takaro, xabaza, xananeyta.

(Rein.) ḏanûn, ḏunâne plural. ḏunôn subst. m., individ. ḏunôn-t-ta plural. -tit
(Af. id.) töcher in den wachsscheiben worin sich der honig oder die binenbrut befindet.

xangazza nf NS, CS1 ~ xangadda CS2, SS buttermilk.

According to MN it is added to honey and water for obtaining the mead [birze →].

xawaz nm NS, CS1 ~ xawad CS2, SS family(ies) {Ty. ḏâwâ ḏâwâ [hawwaz]} sg tv xawazzzo m ~ xawaddo CS2, SS; cf. cishle, dabaa, haadayto, xagaz, zizzaaletta.
Since it is a dangerous procedure, it is always men who collect honey from traditional and natural beehives. According to XA it is carried inside the cells where it is mixed with liquid honey and collected from. 

\( \text{Rein.} \) Hāwō sb subst. coll. m., plur. hāw-it, individ. hāwō-ytā plur. -yt (cf. hāc und hācā) das was ûmbab blume, blûte 306, 24.

xinze \( nm \) NS, CS1 ~ xinde CS2, SS poison (of animals); pl xinizit \( m \) NS, CS1 ~ xindit CS2, SS.

MN believes that lizard [cafur \( \rightarrow \)] gets its poison from the bees [zizzale \( \rightarrow \)], and that snakes [caroora] gets their poison from it. See also under are for further details.

zagaxo \( nf \) kind of tree(s) (Combretaceae?); sgvt zagaxotta \( f \) NS ~ zagaxoyta CS. Branches of this tree are used for producing the smoke [tika] needed by beekeepers for operating within a hive [qaf \( \rightarrow \)]; cfoolac, waybo.

zage \( vI \) NS, CS1 ~ dage CS2 1. to cut 2. to take out \{Af. dage to dig, to make a hole, to pluck\} rel to zagite \( vI \) NS, CS1 ~ daye CS2 to cut, zagnan \( nm \) NS, CS1 ~ daynan CS2 cutting, zagum \( nm \) cut.

— baska zage \( NS \), CS1 ~ baska dage CS2 to remove a honeycomb from the hive, to collect honey.

Since it is a dangerous procedure, it is always men who collect honey from traditional and natural beehives. The removable frames of modern hives, instead, can also be taken out by women. CI used the verb daye instead of zage. For further details see under xabaza.

ziizza \( nm \) ~ ziliza \( NS \), CS1 ~ diida ~ diidda CS2, SS beetle, coleoptera, dung-roller beetle \{Af. diida\} pl ziizit ~ zizizit \( m \) NS, CS1 ~ diidit ~ diiddit; cf bulac, tsidena, uxun, zizzaale.

Insect that produces honey in hollow trees (MC), especially in aloe [cuure \( \rightarrow \)] branches (CI). It is also one of the enemies [caadu] of bees [zizzale \( \rightarrow \)].

zizzale \( nf \) NS, CS1 ~ didaale CS2 ~ dilaale CS2, SS honeybee(s) \{Af. diidaale\} sgvt zizzaaleetta \( f \) NS ~ zizzaleeyta CS1 ~ didaaleeyta CS2 ~ dilaaleeya CS2, SS.

— zizzaleet zan abatiya \( NS \), CS1 ~ didaale (or dilaale) dan abatiya CS2, SS beekeeper (lit. ‘the one who performs the taking care of bees’).

MN distinguishes two kinds of bees: red bees [casa zizzale] and black bees [dat zizzale]. They can live together in the same hive [qaf \( \rightarrow \)]. Another insect similar to bees is called okoli zizzale (lit. ‘donkey bee’). It is a mining bee, like the tsidena \( \rightarrow \), but doesn’t produce honey.
According to Dag and Weiss (see Bibliography) and other literature, there are three types of honeybees in Eritrea: *Apis mellifera monticola*, *Apis mellifera scutellata* and *Apis mellifera yemenitica*.

For informations about the life cycle of bees see under ubub.

(Rein.) Didalé die bine, apes; s. didalé.

Didalé und zizalé, seltener didalé subst. coll. fem., indiv. -yta

plur. -ytî (Af. didalé, cf. G. *διάλη*, *ίαλη*; fliege, *-Nazi*, *-Nazi* susurrare) die bine, didalé sâm die binekônigin, ‘A.

80, 3. 5. 9. 12.

*zizzaaletta* *nm* *NS* ~ *zizzaaleyta* *CS1* ~ *didaaleyta* *CS2* ~ *dilaaleyta* *CS2*, *SS*

swarm; cf *cishle, dabaa, haadayto xagaz, xawaz*.

For further details see under *cishle*. 
### ENGLISH-SAHO INDEX

This is just a general reference list. More specific terms can be found under the main entries.

**Activities and products of the bees**

<table>
<thead>
<tr>
<th>English</th>
<th>Saaho</th>
</tr>
</thead>
<tbody>
<tr>
<td>honey</td>
<td>baska</td>
</tr>
<tr>
<td>honey (pure and liquid)</td>
<td>inti, lanle</td>
</tr>
<tr>
<td>honey (mixed, beebread)</td>
<td>bukke</td>
</tr>
<tr>
<td>nectar</td>
<td>dhacammucus</td>
</tr>
<tr>
<td>poison</td>
<td>xinze</td>
</tr>
<tr>
<td>pollen</td>
<td>xawo</td>
</tr>
<tr>
<td>propolis</td>
<td>dacmur</td>
</tr>
<tr>
<td>wax</td>
<td>congoffe, shimca</td>
</tr>
</tbody>
</table>

**Beehive and apiary**

<table>
<thead>
<tr>
<th>English</th>
<th>Saaho</th>
</tr>
</thead>
<tbody>
<tr>
<td>beehive</td>
<td>qafo</td>
</tr>
<tr>
<td>beehive (natural)</td>
<td>caretto, gaxseena, murhcumse</td>
</tr>
<tr>
<td>beehive (traditional)</td>
<td>gidacto (→ gidac), mascashalä</td>
</tr>
<tr>
<td>entrance (of the beehive)</td>
<td>maatot</td>
</tr>
<tr>
<td>lid (of the beehive)</td>
<td>gamad</td>
</tr>
<tr>
<td>fence, apiary</td>
<td>dagge</td>
</tr>
</tbody>
</table>

**Bees life cycle and swarm**

<table>
<thead>
<tr>
<th>English</th>
<th>Saaho</th>
</tr>
</thead>
<tbody>
<tr>
<td>bee</td>
<td>zizzaale</td>
</tr>
<tr>
<td>guardian bee</td>
<td>dhawrheena, maxaarho, wardiya</td>
</tr>
<tr>
<td>worker bee</td>
<td>shaqqaala</td>
</tr>
<tr>
<td>to bite</td>
<td>are</td>
</tr>
<tr>
<td>bundle of branches used for capturing the swarm</td>
<td>canqel, mascashala</td>
</tr>
<tr>
<td>to buzz (of a swarm)</td>
<td>isqithire</td>
</tr>
<tr>
<td>drone, male bee</td>
<td>canjur</td>
</tr>
<tr>
<td>egg</td>
<td>ubub</td>
</tr>
<tr>
<td>larva</td>
<td>xanane</td>
</tr>
<tr>
<td>pupa</td>
<td>amoodasse, dhanqacalla</td>
</tr>
<tr>
<td>queen bee</td>
<td>abba, ina, nugus, reezanto, shuum</td>
</tr>
<tr>
<td>swarm</td>
<td>cishle, dabaa, haadayto, xagaz, xawaz, zizzaalletta</td>
</tr>
</tbody>
</table>

**Enemies of the bees and other bee-related animals**

<table>
<thead>
<tr>
<th>English</th>
<th>Saaho</th>
</tr>
</thead>
<tbody>
<tr>
<td>ant</td>
<td>dhuurhe</td>
</tr>
<tr>
<td>bat</td>
<td>lashshab</td>
</tr>
<tr>
<td>beetle</td>
<td>ziiza</td>
</tr>
<tr>
<td>genet</td>
<td>saxdad</td>
</tr>
<tr>
<td>honeyguide bird</td>
<td>irir</td>
</tr>
<tr>
<td>(kind of) insect</td>
<td>bulac</td>
</tr>
<tr>
<td>lizard</td>
<td>cafur</td>
</tr>
</tbody>
</table>
mining bee
spider
wasp

Harvesting and usage of the honey
fermentation
to harvest
mead, hydromel, honeywine

Honeycomb
honeycomb (closed)
honeycomb (new and empty)
honeycomb (filled)
honeycomb (old and empty)
honeycomb’s cell

Morphology of the bee
abdomen
antenna
head
sting
wing

Plants, shrubs and trees
alaaki, balasa, cawun, cuure, gaaxunrhe, gargeera, gelgel mesqel, goto, indacaaro, kusura, mazba, muxumwaaxe, oolac, oolal, qalaaminthos, saraw, siraceera, sucuda, tabab, timbaako, waxamwaaxe, waybo, zago

Tools and accessories
containers
cage for the queen bee
galadda, idrotta, koora, macdanto, safxa, shaxan, sibbarh chaachun

okoli zizzaale (→ zizzaale), tsdeena cako uxun
askhamar zage bathce, birze, malab, mees, Xaliima macar
lubud samfe, takaro folotta, ganra, xabaza, xananeyta ganra curum

gabbe gashsha amo, xangal iko gale
alaaki, balasa, cawun, cuure, gaaxunrhe, gargeera, gelgel mesqel, goto, indacaaro, kusura, mazba, muxumwaaxe, oolac, oolal, qalaaminthos, saraw, siraceera, sucuda, tabab, timbaako, waxamwaaxe, waybo, zago

galadda, idrotta, koora, macdanto, safxa, shaxan, sibbarh chaachun