# NINOTSMINDA HONEY SPECIFICATION

NUMBER OF REGISTRATION: 21

DATE OF REGISTRATION: 01/10/2020

NAME OF PRODUCT FOR WHICH REGISTRATION OF: Honey

NAME AND ADDRESS OF APPLICANT: RC "Kodi"; Ioane Petritsi St. №2, 0800, Akhaltsikhe, Georgia

1. NAME: NINOTSMINDA HONEY

### 2. DESCRIPTION

"Ninotsminda Honey" is food product made by honey bees (Apis mellifera caucasica) with the flowers of plants of Javakheti Plateau situated within the borders of Ninotsminda Municipality. "Ninotsminda Honey" is collected at the period of June-July and made with the plants of Subalpine and Alpine zones; the harvest can be taken 2-3 times from one beekeeping point at said period, because of that honey can be of various colors.

"Ninotsminda Honey" is characterized with:

Moderately developed aroma;

Moderately sweet, pleasant and specific taste;

 $Color \hbox{--light yellowish or nearly colorless, and rarely-maroon.}$ 

"Ninotsminda Honey" can be viscous, creamy and wholly or partly crystallized with its consistence.

"Ninotsminda Honey" is characterized with natural tendency to be crystallized, which is caused by its purity and high quality, and in accordance with that, it can be sold in liquid or solid (crystallized) forms.

"Ninotsminda Honey" is transferred into white or ivory creamy with fine crystals or solid mass, as a result of crystallization. It includes inversed sugars of more than 72% content, and has low indicator of "Diastase Figure" – 8-10, in accordance with Shade Scale. Its water permissible content is no more than 19.5%, and electromagnecity – no more than 0.8 ml/cm.

# 3. GEOGRAPHICAL AREA

"Ninotsminda Honey" production area is the territory of Ninotsminda Municipality including the following villages:

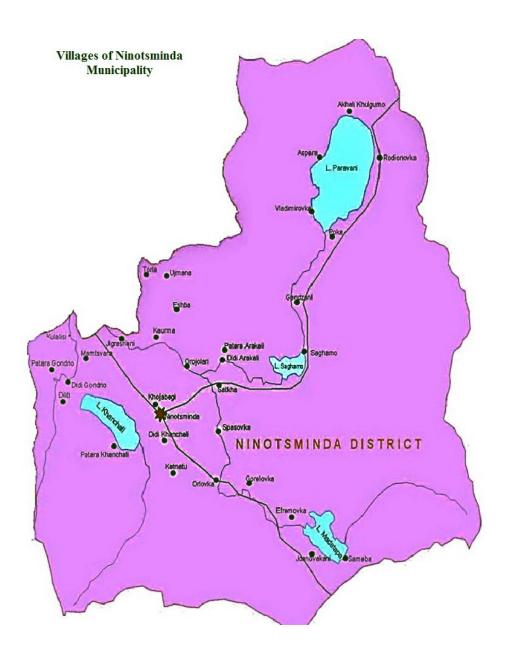
Aspara (41°27'10.82"N, 43°46'56.10"E), Akhali Khulgumo (41°29'15.48"N, 43°48'53.18"E),

Gandzani (41°20′53.77"N, 43°45′5.59"E), Gorelovka (41°12′52.94"N, 43°41′28.48"E), Didi Arakali (41°18′16.01"N, 43°39′52.14"E), Didi Gonduri (41°17′36.24"N, 43°28′48.94"E), Didi Khanchali (41°14′41.83"N, 43°35′38.92"E), Dilipi (41°16′38.27"N, 43°28′12.26"E), Epremovka (41°11′25.62"N, 43°45′2.60"E), Eshtia (41°20′26.90"N, 43°36′44.97"E), Vladimirovka (42°53′33.25"N, 41°13′56.97"E), Toria (41°22′4.88"N, 43°34′26.27"E), Katnatu (41°13′35.57"N, 43°36′9.85"E), Mamtsvara (41°18′15.98"N, 43°30′14.10"E), Orlovka (41°13′ 6.80"N, 43°39′16.73"E), Orgolari (41°18′3.85"N, 43°37′8.74"E), Patara Arakali (41°18′49.48"N, 43°40′0.76"E), Patara Gonduri (41°17′53.94"N, 43°27′31.34"E), Patara Khanchali (41°14′ 37.98"N, 43°31′48.16"E), Patara Khorenia (41°20′14.23"N, 43°31′17.56"E), Zhdanovakani (41°9′56.27"N, 43°46′21.86"), Paravani (41°27′4.63"N, 43°51′14.06"E), Satkhe (41°16′49.16"N, 43°39′ 6.78"E), Sameba (41°9′36.65"N, 43°42′9.64"E), Saghamo (41°18′ 47.52"N, 43°45′ 38.10"E), Spasovka (41°14′56.82"N, 43°39′37.78"E), Tambovka (41°28′50.86"N, 43°48′5.48"E), Ujmana (41°22′1.78"N, 43°35′53.73"E), Poka (41°23′48.15"N, 43°47′34.28"E), Kaurma (1°19′18.25"N, 43°35′1.13"E), Kulalisi (41°19′35.43"N, 43°28′49.76"E), Jigrasheni (41°19′5.92"N, 43°32′17.68"E).

"Ninotsminda Honey" production area (Ninotsminda Municipality) is situated on 1950-2200 m above the sea level. Its South-Western border coincides with the Georgia-Turkey border, and the Southern – with the Georgia-Armenia border. Tsalka Municipality borders it from the North, Akhalkalaki Municipality – from the West, and Dmanisi Municipality – from the East. Area of Ninotsminda Municipality covers 1353.9 km<sup>2</sup>.

 $(\underline{http://ninotsminda.ge/portal/alias\_Ninotsminda/tabid\_3491/default.aspx})$ 





Ninotsminda Municipality on the Map of Georgia

### 4. LINK WITH GEOGRAPHICAL AREA:

#### 4.1. SPECIAL ENVIRONMENTAL CHARACTERISTICS

Ninotsminda Municipality is situated in South Georgia, on volcanic Javakheti Plateau, on 1950-2200 m above the sea level.

Ninotsminda Municipality is characterized with plateau continental climate: the winter is cold and snowy, and the summer is cool. The temperature of the coldest month – Jenuary is -11°C, and of the warmest – August is +13°C. Annual sum of precipitations is 733 mm. The River Paravani with its small tributaries flows in the municipality. Territory of GI "Ninotsminda Honey" is known for abundance of lakes: Paravani, Madatapa, Khanchali Lake, Saghamo Lake, Bughdasheni lake, etc. There are a lot of groundwaters and wetlands covering area of 4000 ha. Some of the lakes and wetlands are protected within Javakheti territory.

Collection of nectar and flower dust by bees begins in June and continues until September in Ninotsminda Municipality. The following natural phenomena take place at that period:

- a. sharp contrast between daily and night temperatures hot days and cold nights, which facilitates formation of nectar aromas and taste qualities.
- b. daily heat causes lake water evaporation, and at night when temperature falls down the evaporated water is condensed; due to this, the valley is covered with dew at dawn leading nectar formation in honey plants.

Javakheti National Square was built in March, 2011. It includes the territory existing between administrative borders of Akhalkalaki and Ninotsminda municipalities, and its area is 14.206.83 ha. National Square territory is protected; so, plowing, spraying with pesticides, hunting and fishing are prohibited there.

Flora of Ninotsminda Municipality is rich and manifold as a result of special natural conditions. Most part is treeless and covered with mountain and meadow-valley plants.

Water and bog plants are spread around the lakes and boggy hollows. Subalpine and Alpine meadows are situated on more than 2000 m above the sea level. Flora of this place is characterized with rare endemic varieties: 474 varieties joined in 235 genuses and 62 families, characterizing only wetlands. Javakheti Plateau is rich in 171 endemic and conditionally endemic varieties that indicates high biodiversity and especially natural conditions of the region.

There are the following plant varieties in Ninotsminda Municipality: sedum (Sedum caucasicum), gladiolus (Gladiolus dzavacheticus), birdsfoot trefoil (Lotus caucasicus), lady's mantle (Alchemilla georgica, Alchemilla subsplendes), white clover (Trifolium repens), cruciferae (Brassicaceae), greater burdock (Artium lappa L.), leguminosae (Fabaceae), largest masterwort (Astrantia maxima pall), mint (Lamiaceae), pink family (Caryophyllaceae), giant scabious or yellow scabious (Cephalaria gigantea), thistles (Cirsium simplex), centaurea (Centaurea macrocephala Muss), yarrows (Achillea sedelmeyeriana), melilot (Melilotus officinalis (L.) pall), Javakheti lucerne (Medicago dzhawakhetica), blueweed (Echium vulgare), etc.

Above described natural phenomena, protected territories and varied flora create especial environment where unique "Ninotsminda Honey" is produced.

## 4.2 REPUTATION

Honey produced in Ninotsminda Municipality is well known from times immemorial for Samtskhe-Javakheti population, and it is traditionally recognized in the region. Famous Georgian Turkologist, researcher of the "Great Defter of Gurjistan Vilayet", professor Mikheil Svanidze, in his book "Agriculture of South-Western Georgia of the 16<sup>th</sup> Century" (page 101), noted: "Beekeeping was very advanced in Samtskhe-Saatabago, it was encouraged with favorable climatic factors and rich nourishing bases of local flora – fruit trees and other honey plants. Vakhushti wrote about beekeeping in Samtskhe-Saatabago – "bees and various kinds of high quality honey are in abundance" (Vakhushti, "Description of the Kingdom of Georgia", page 745); French traveler G. Chardin also noted the same (G. Chardin, "Travels to Persia and other Eastern Countries", page 270)". According to Mikheil Svanidze's research: beekeeping was developed in the 16<sup>th</sup> century, in 702 villages from 711 of Samtskhe-Saatabago, where 91576 beehives were placed, wherefrom 686820 kg honey was produced, annually. On average 3.6 kg honey was produced in one household. We are interested in Samtskhe-Saatabago towns – Akhalkalaki, Liva, Akshehiri, etc. the data looking like that: "beekeeping is practiced in all 45 local villages, where 3239 beehives are placed, and 48585 kg honey is produced annually. Household quantity is 605, and one household honey production is 5.3 kg. Akshehiri Region of that time had occupied the territories of Akhalkalaki and Ninotsminda municipalities of today, and it is described in "Akhalkalaki Javakhetisai" like that: "Akshehiri Region included Akhalkalaki Plateau, from Javakheti Range to Mtkvari (Kur) Canyon. According to size, this was the largest region characterized with the abundance of villages". (Source-DZEGLEBI.GE-Akhalkalaki Javakhetisai http://www.dzeglebi.ge/statiebi/istoria/axalqalaqi\_javaxetisai1.html).

#### 5. HONEY PRODUCTION

The beehives for "Ninotsminda Honey" production shall be placed in Ninotsminda Municipality area, on places safe for bees from bee infectious diseases.

Bee mountaineering from other municipalities to Ninotsminda is permitted in June-August, and from Ninotsminda to the others – in February-May, but with guarantee that other honey won't be mixed with "Ninotsminda Honey", for which purpose it is necessary to meet the following requirements: 1) Ganymede grid shall be placed in each beehive between nest-case and product (honey)-case; 2) Frames full with honey shall be replaced with dry empty frames, and honey-product shall be squeezed only from those honeycombs; 3) Honey-frames conveyance from nest-case to product-case by beekeeper is prohibited in any case.

Honeycombs removal from beehives and its transportation to the workshop shall be executed without their pollution.

The workshop shall be equipped with fulfillment of legitimately established satisfying sanitary and hygienic requirements, at honey squeezing. Beeswax shall be removed from filled with honey waxed honeycombs, which then shall be brought into the workshop, squeezed, filtered, homogenized and placed in special vessels intended for food product storage.

"Ninotsminda Honey" packing shall be executed only in glass cans. Received honey each consignment (lot) shall satisfy all requirements of specification.

### 6. ORIGINATE APPROVAL

Business operator interesting to use GI "Ninotsminda Honey" is obliged to:

- 1. Produce honey within Ninotsminda Municipality;
- 2. File declaration about his local beehives quantity indicating coordinates of each one, all received all honey amount, including this one, which can be qualified as GI "Ninotsminda Honey";
- 3. Invite cooperative "Kodi" agent in beehives location, show him workshop with its equipment, represent him document about its correspondence with quality and safety, and notes made in the journal, as well, before squeezing;
- 4. Each business operator is obliged to create annual declaration about own honey reserve. Data about each kind of honey, delivery and storage shall be noted in registration journal.

Product analyses and organoleptic taste is used for product origination approval, as well.

Written permission on GI "Ninotsminda Honey" usage shall be granted after honey origination and correspondence approval, wherein specific consignment (lot) and honey amount shall be noted.

### 7. LABELING

Labeling of honey packed in glass vessel shall be provided with full compliance with the "Technical Regulations on Honey" and the "Technical Regulations on Additional Requirements of Food Labeling".

In the central part of the label should be indicated "Geographical Indication Ninotsminda Honey" together with the logo. Additionally, the logo shall be placed on the top of the glass vessel, as well.

## with Latin font – NINOTSMINDA HONEY

#### with Russian font – НИНОЦМИНДСКИЙ МЁД

## 8. CONTROL

The internal control of "Ninotsminda Honey" compliance with specifications shall be carried out by cooperative "Kodi", and external control – in accordance of the Legislation of Georgia.

# REFERENCES AND LITERATURE USED:

- 1. <a href="http://w3.cenn.org/cenn\_projects/MC\_CCA/Baseline%20Survey%20Reports/Georgia/MC\_CENN\_Baseline%20Survey%20Report%20of%20Ninotsminda\_EU\_GEO.">http://w3.cenn.org/cenn\_projects/MC\_CCA/Baseline%20Survey%20Reports/Georgia/MC\_CENN\_Baseline%20Survey%20Report%20of%20Ninotsminda\_EU\_GEO.</a>
- 2. <a href="http://ninotsminda.ge/">http://ninotsminda.ge/</a>
- https://ka.wikipedia.org/wiki/%E1%83%9C%E1%83%98%E1%83%9C%E1%83%9D%E1%83%AC%E1%83%9B%E1%83%98%E1%83%9C%E1%83%93%E1%83
- 4. <a href="http://www.dzeglebi.ge/statiebi/istoria/axalqalaqi\_javaxetisai1.html">http://www.dzeglebi.ge/statiebi/istoria/axalqalaqi\_javaxetisai1.html</a>
- 5. http://apa.gov.ge/ge/biomravalferovneba/djavaxetis-daculi-teritoriebis-biomravalferovneba

- 6. Guram Koblianidze, Shota Chogovadze, "Georgian Honey". Publishing House "Soviet Georgia", Tbilisi, 1980
- 7. Mikheil Svanidze "Agriculture of South-Western Georgia in the XVI Century". Publishing House "METSNIEREBA (Science)", Tbilisi, 1984.