

## Original article

## Food as a marker for economy and part of identity: traditional vegetal food of Yezidis and Kurds in Armenia

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## ABSTRACT

**Background:** The traditional food of the Yezidis and Kurds of Armenia has some particularities and differences compared with the traditional cuisine of Armenians.

**Methods:** Ethnobotanical data collected during fieldworks in 2013–2015 in Armenia via interviews, direct observations and sampling of used plants for identification of species.

**Results:** Traditional dishes of Yezidis and Kurds are simple. They are mostly made from or contain as a main component lamb and milk products (sometimes beef and chicken, but never pork). The main vegetal components of their traditional food are represented by cultivated cereals, grains, and herbs of wild plants. Edible plants gathered from the wild are used primarily for nutritional purposes, for flavoring prepared meals and milk products, and for tea.

**Discussion:** We correlate these distinctions with the transhumant pastoral lifestyle of the Yezidi and Kurdish people.

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## 1. Introduction

The largest ethnic minority of Armenia is *Kurmanji* (a language of northern Kurds) speaking people who confess Yezidism (or Sharfadin) [1–4]. The majority of these people call themselves Yezidi and believe that Yezidi is an ethnic group, while some of them call themselves Kurds and argue that Yezidism is just a religion<sup>1</sup>. In Armenia, Yezidis live mainly in the region of Mount Aragats and in the Ararat Valley, a territory which falls into four administrative regions (*marzes* in Armenian): Aragatsotn, Armavir, Ararat, and Kotayk<sup>2</sup>. Yezidis of Armenia, primarily descendants of refugees from the eastern parts of the Ottoman Empire, keep their memories about forced migration with their Armenian fellow villagers in the first quarter of the 20<sup>th</sup> century in the oral traditions through family stories. The lesser part of this population, mostly living in the

foothills and highland plains of the northern part of Mount Aragats (territories administratively included in the Aragats and Talin regions of Aragatsotn *marz*), are descendants of earlier migrants who came there in several waves throughout the last 2 centuries [1,5].

Yezidis and Kurds of Armenia are typically settled in rural or suburban areas, which are largely preconditioned by their economic activity [5–7]. Until recent decades the main occupation of Yezidis and Kurds in Armenia was sheep breeding [8]; other forms of agriculture including plant breeding were small scale and not obligatory [7]. Present public opinion as well as professional and media circles see Yezidis as “nomadic pastoralists”, devoid of any relation with plants. However, the ethnobotanical studies carried out in 2013–2015 suggest that the aforementioned opinion is rather a stereotype. Currently, many Yezidi families, primarily those living in the Ararat Valley, do not practice animal breeding or do it on a small scale. Regarding plant gathering, in fact, Yezidis and Kurds can be characterized by distinct gathering traditions along with associated culinary and folk medicine practices.

## 2. Materials and methods

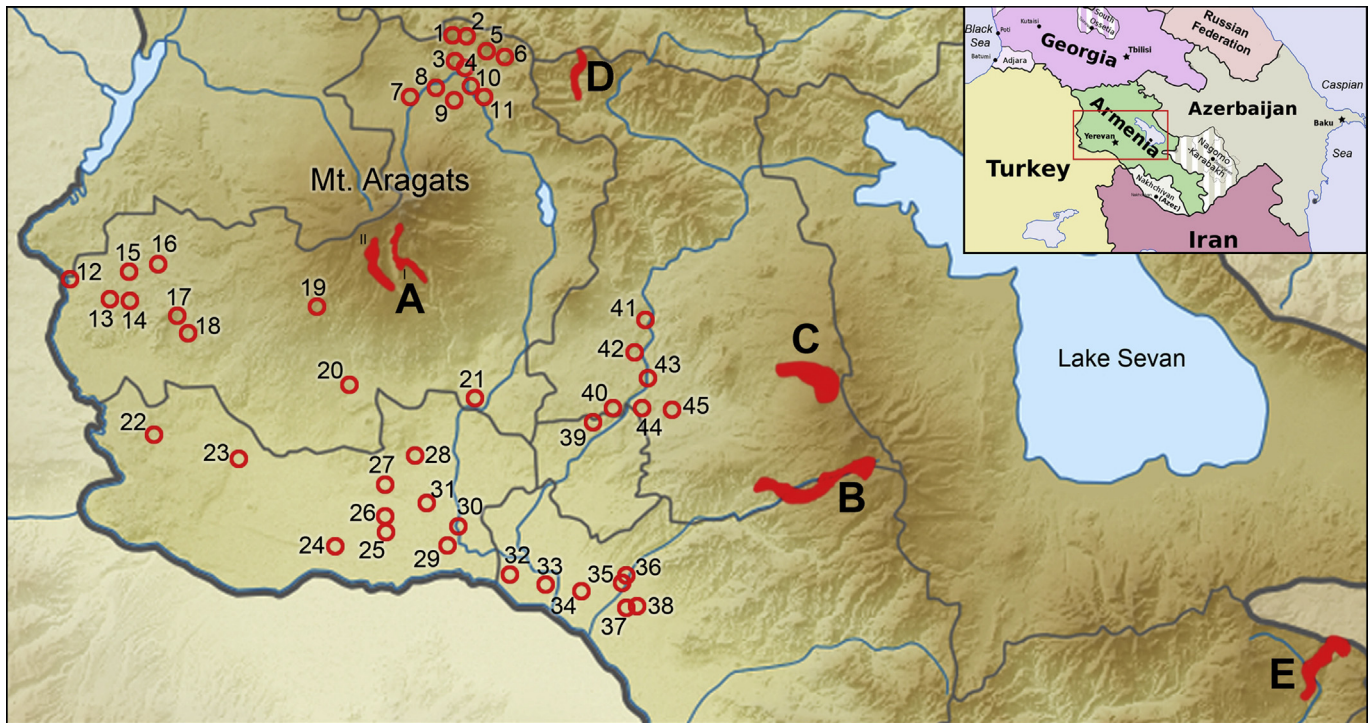
This is documentative and descriptive work predominately aimed at uncovering the vegetal component of Armenian Yezidi and Kurdish people’s traditional food, which has remained generally in the shadows in scientific literature until now.

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<sup>1</sup> The ethnic identity of these people with identical ancestry, language, religion, and household culture is complicated and will not be discussed below as it is not issue of our current study. All *kurmanji* speaking people in Armenia accept Yezidi identification and there are no differences in traditional food.

<sup>2</sup> The results of the 2011 population census of the Republic of Armenia. National statistical service of RA. <http://armstat.am/file/doc/99486253.pdf> [cited 2015 Sep 20].



**Fig. 1.** Map showing studied settlements (circles with numbers) and areas with temporary pasture stations in the mountains (red colored with letters). Village 1: Sipan; 2: Avshen; 3: Jamshlu; 4: Alagyaz; 5: Charchakis (Derek); 6: Mijnatun (Ortachia); 7: Sadunts; 8: Kaniashir; 9: Shenkani; 10: Rya Taza; 11: Mirak; 12: Tlik; 13: Hakko; 14: Kanch (Gyalto); 15: Sorik; 16: Hatsashen (Sabunchi); 17: Arevut (Barozh); 18: Ddmasar (Ghapaghtapa); 19: Metsadzor (Avtola); 20: Shamiram; 21: Oshakan (Aragatsotn marz); 22: Shenik; 23: Myasnikan; 24: Tandzut; 25: Yeghegnut (Badal); 26: Zartok (Ghamshlu); 27: Aknalich; 28: Ferik; 29: Jrrarat; 30: Aknashen; 31: Aratashen (Armavir marz); 32: Ranchpar; 33: Noramarg; 34: Mkhchyan; 35: Mrganush; 36: Getazat; 37: Berdik; 38: Verin Artashat (Ararat marz); 39: Zovuni; 40: Kanakeravan; 41: Banavan; 42: Nor Geghi; 43: Arzni; 44: Balahovit; 45: Mayakovskiy (Kotayk marz). High mountainous temporary pastoral stations: A: Mount Aragats; B: Mount Ajdahak; C: Sevaberd; D: Hankavan; and E: Jermuk.

The primary data of the current study—information about traditional food—was collected via direct observations and oral histories recorded in interviews in more than 40 villages and approximately 20 high mountainous temporary pastoral stations (Fig. 1). Yezidi villages, Kurdish villages, and villages with mixed populations (with Armenians) were investigated: Banavan, Nor Geghi, Arzni, Mayakovskiy, Balahovit, Zovuni, Kanakeravan (Kotayk marz), Ranchpar, Noramarg, Mkhchyan, Verin Artashat, Berdik, Mrganush, Getazat (Ararat marz), Ferik, Aknalich, Aratashen, Aknashen, Tandzut, Zartok (Ghamshlu), Yeghegnut (Badal), Jrrarat, Shenik, Myasnikan (Armavir marz), Tlik, Arevut (Barozh), Ddmasar (Ghapaghtapa), Sorik, Hatsashen (Sabunchi), Metsadzor (Avtola), Kanch (Gyalto), Hakko, Shamiram, Oshakan, Mirak, Rya Taza, Charchakis (Derek), Alagyaz, Shenkani, Jamshlu, Sipan, Avshen, Mijnatun (Ortachia), Sadunts, Kaniashir (Aragatsotn marz), as well as high mountainous temporary pastoral stations of Mount Aragats, Mount Ajdahak, and surroundings of Sevaberd, Hankavan, and Jermuk (Fig. 1).

We used a semiquantitative method to describe types of gathered plants used for particular goals (Table 1). Plants gathered and used for dietary purposes were sampled and later identified [21] and stored (selected samples) in the herbarium of the Institute of Botany NAS, Armenia.

### 3. Results and discussion

Although for many Yezidis and Kurds animal breeding is no longer a primary occupation in Armenia<sup>3</sup>, animal products and food prepared using meat and milk products are still most preferred and

in higher demand<sup>4</sup>. Local Yezidis and Kurds from older generations often refer to the taste of cooked meat when they want to qualify other dishes. We connect these strong connections with animal food products with sheep breeding and the transhumant pastoral lifestyle which predominated among Yezidis and Kurds in Armenia [7].

Due to a seminomadic pastoral economy plant cultivation among the Yezidis and the Kurds was not diverse until recent decades and was often limited to the cultivation of cereals to satisfy only family needs [5,22,23]. Consequently the majority of traditional dishes prepared using cultivated plants are based on cereals [5]. Presently the plant cultivation practices of this “sun-worshipping” people closely replicate those of the Christians living in the same region, specifically the Armenians, and their food is very similar [9,10,24]. There are a few peculiarities in the traditional food of the Yezidis that stem from their beliefs and caste system (avoiding pork, cabbage, and some other products, see below) but these are not widespread.

According to our observations and interviews as well as notes in some publications [5,6,22], traditional dishes prepared and preferred by Yezidis and Kurds in Armenia can be grouped by main components and according to preference: meat, milk products, cereals/grains, and herbs. When grouped according to use, these foods are (from most used to least used): cereal products, milk products, herbs (depends from the season), and meat. Usually dishes are made from a combination of two or more components. Vegetable components are traditionally represented by cereals and wild herbs, occasionally adding grain pulses, and in recent years vegetables and fruit. Traditional vegetal components of food often

<sup>3</sup> H. Melkumyan, R. Hovsepyan. On the Agriculture of Yezidis and Kurds in Soviet and Post-Soviet Armenia (in preparation).

<sup>4</sup> T.F. Aristova [5] observed the same. She also wrote (p. 154) that meat and milk products are the main goods traded by Yezidis and Kurds in markets.

serve as a secondary component or as a condiment/flavoring for meats (vegetal dressings) or milk-based dishes and other food (yogurt soup, cheese, curd, etc.). However, there are also pure vegetal dishes (e.g., various versions of porridges or boiled herbs) or dishes where the animal component is secondary (e.g., meat in the porridges) or tertiary (e.g., butter in the porridges).

The general dishes considered as traditional for Yezidis and Kurds in Armenia that are prepared using vegetal components include breads (*nan* in Kurmanji), various cooked herbs (Fig. 2) and herbal soups, *gərar* (Kurmanji name; a sour yogurt soup; Figs. 3 and 4), *kərchik* (Armenian name; a porridge; Fig. 5), *harisa* (Armenian name; meat porridge), *khavits* (Armenian name, roasted flour with sugar and butter), *qyalagosh* (Turkish name; meat porridge with cereals, pulses, herbs, etc.), *rəsh̄te* (probably a Kurmanji name; type of flat macaroni), etc.<sup>5</sup> The main vegetal components in these traditional dishes are cereals and herbs, and occasionally also beans. For the remainder of this article we will concentrate on the vegetal food products or components which are not published or poorly observed, and which therefore are unknown to the scientific community.

The main cereal used in Yezidi and Kurdish dishes is bread wheat (*Triticum aestivum* L. s.l.). Rice (*Oryza spp.*) takes second place due to its scale of use in traditional cuisine. Other cereals such as barley (*Hordeum vulgare* L.; widely used in the past), durum wheat (*Triticum durum*), rye (*Secale spp.*), and corn (*Zea mays*) are rarely used, especially in the present day. Notably, emmer wheat was neither observed to be used nor mentioned by Yezidis and Kurds during our interviews<sup>6</sup>.

Cereals, particularly bread wheat grain processed in a different ways, is the main component of traditional vegetal dishes of Yezidis and Kurds in Armenia. It is also the main cereal used for bread baking (as in most parts of the world). Bread wheat is cooked in different ways starting from a simple porridge with nothing added except salt to “fancy” porridges including meat (e.g., *harisa*) or various herbs and adding butter (e.g., *kərchik*) and salt. Elderly people attest that “in bad times” barley replaced wheat in these dishes and for bread baking.

Wild plants gathered and used in food by the Yezidis and Kurds of Armenia are more diverse and have a more varied usage<sup>7</sup>. Contrary to plant cultivation, which might have been small scale or even absent for some periods for the majority of Yezidis and Kurds until recently, gathering has been a traditional and essential aspect of these people’s livelihood. In his ethnographic study of Kurds (including Yezidis) carried out in the second half of 19<sup>th</sup> century, Egiazarov [25] wrote: “It is barely possible that any other people use in their food as many herbs as Kurds do.”

Edible plants gathered and used by the Yezidis and Kurds in Armenia fall into the following categories according to their main purposes of use<sup>8</sup>: nutritional [e.g., *Rumex crispus* (Figs. 6 and 7),

*Malva neglecta*, *Chenopodium spp.*, *Amaranthus spp.* (Fig. 2), *Spinacia oleracea*, *Tragopogon spp.*, *Falcaria vulgaris* (Fig. 8), *Polygonum arenastrum* (Fig. 5), etc.]; flavoring [e.g., *Thymus spp.* (Fig. 8), *Mentha spp.*, *Allium spp.* (Figs. 9 and 10)]; fresh/salad (e.g., *Cirsium esculentum*, *Sempervivum transcaasicum*, *Tragopogon spp.*); pickles [*Chaerophyllum spp.*, *Astrodaucus spp.* (Fig. 7), *Falcaria vulgaris* (Fig. 8), etc.]; cheese and curd flavoring and decorating [*Allium spp.* (Figs. 9 and 10), *Chamaescidium acaule*, *Thymus spp.* (Fig. 8), *Polygonum arenastrum* (Fig. 11), *Ranunculus spp.* (Fig. 10), etc.]; tea (e.g., *Hypericum perforatum*, *Mentha longifolia*, *Thymus spp.*, *Plantago major*, *Matricaria spp.*; Table 1). In addition, various edible berries are gathered and consumed for nutritional purposes: rosehip (*Rosa spp.*); plums (*Prunus spp.*); cherries [i.e., *Prunus incana* (Pall.) Batsch]; hawthorn (*Crataegus spp.*); and berries from genus *Rubus*, etc.

This vegetal “raw material” is usually gathered by aged and experienced women or groups of young women, girls, and children usually led by an elderly woman. Sometimes shepherds (men, teenagers, or boys) are also engaged in gathering of plants, which are not available at that time in the surrounds of villages or mountainous stations. The preferable location for edible plant gathering is in the mountains, in the vicinity of *zozan-s* or *oba-s* (temporary camps, usually a group of tents, used to live during pasturing periods in the mountains). In general, areas of plant gathering mostly cover middle mountainous (villages, stationary settlements; 1,000/1,200–2,000 m above sea level) and high mountainous areas (temporary livestock stations), > 2,000 m up to 3,400 m above sea level. In the lowlands and particularly in the Ararat Valley, Yezidi people, chiefly those who are engaged in animal husbandry and move to mountain pastures in the hot season, do not tend to practice gathering because they believe the lowland plants lack nutritive, flavoring, and medicinal qualities. Plants gathered and used for food are generally ruderal and segetal weeds related with human activity, particularly animal herding and agriculture.

Regarding the utilized parts of gathered plants, leaves and other overground/aerial parts are mostly used (Figs. 2, 4, 6, 7, 9, 11), however, flowers (e.g., Fig. 10), roots, bulbs, and other underground parts are used as well (Table 1). Gathered herbs are washed and chopped prior to cooking. Informants always note that plants growing in the mountains and in lowlands have different qualities: the ones gathered in the mountains are more lush, juicy, and sweet compared with the same species growing in lowlands. In particular, plants growing around settlements are said to be smaller, dry, hard and, most importantly, bitter, which is why they are not preferred for use in food.

Some wild edible herbs can be eaten in their raw state, immediately in the field, or as salads. However, more often wild herbs are cooked (Figs. 2–5). Methods of preparing wild herbs gathered and used for nutritional purposes are varied. Usually the herbs are boiled in water, then the water is filtered and butter or vegetable oil is added to the boiled herbs (they can also be dry cooked without water); salt as preferred. Onion or eggs can also be added (Fig. 2). Wild edible herbs are often prepared with cereals such as porridge, called *kərchik* (Fig. 5; Armenians, Yezidis, and Kurds use the same name for this porridge). Usually, curly dock (*Rumex crispus*; *tərs̄ho* in Kurmanji) or common knotgrass (*Polygonum aviculare*; *nanjəujək* in Kurmanji) are used in this *kərchik*-porridge. The second most common way to prepare nutritional edible plants is by making various soups from them. Usually, potato and/or small balls made from fragmented bread wheat can be added to such soups. The Yezidis and Kurds of Armenia have a special version of yogurt soup, called *gərar* in Kurmanji, which is currently extremely rare amongst Armenians and other nationalities of Armenia. The main difference of this yogurt soup from the variants prepared by Armenians or by

<sup>5</sup> Some of these foods, e.g., bread, *harisa*, *rəsh̄te*, *khavits*, are described in T.F. Aristova’s [5] book. Arakelyan [22] wrote that bread, yogurt, cheese, butter, milk, and *tan* as a drink (yogurt based) were everyday foods among Kurds. For parties and celebrations wealthy Kurds prepared grilled chicken, lamb, mutton, *pilav*, and *qufta*. He also writes about two “typical Kurdish” dishes, *burbel* and *qullama*, which are no longer extant; both were prepared using exclusively lamb or mutton and also yogurt (in the case of *burbel*).

<sup>6</sup> Moreover, when direct questions about the use of emmer wheat have been asked, the response was always negative. Once we observed how an Armenian man, a trader, drove into a Kurdish village and tried to sell or barter emmer wheat, with no success.

<sup>7</sup> There were no studies and publications about ethnobotany of Yezidis and Kurds of Armenia before now. All Latin binomial names given in the manuscript are identifications and notes by the first two authors of this article.

<sup>8</sup> This separation is conditional as, e.g., plants used chiefly for nutritional purposes also have some flavoring effect and *vice versa*. The same plant can appear in two or more categories.

**Table 1**  
List of plants gathered and used for food by the Yezidis and Kurds of Armenia.

Names used by Yezidis & Kurds	English names	Plants		Usage purposes and preparation						
		Scientific Latin binomial names	Family	Boiled, nutritional	Soup, nutritional	Soup, flavoring	“Grar”, nutritional	“Grar”, flavoring	Cooked, other, nutritional	Fresh/salad, nutritional & flavoring
Tərsho	Curly dock	<i>Rumex crispus</i> L.	Polygonaceae	1	1	–	2	–	3	3
Gyazgyazk	Stinging nettle	<i>Urtica dioica</i> L.	Urticaceae	3	1	–	3	–	–	2
Tolək	Mallow	<i>Malva neglecta</i> Wallr., <i>M. pusilla</i> Smith	Malvaceae	2	1	–	2	–	–	–
Nanujək	Common knotgrass	<i>Polygonum arenastrum</i> Boreau	Polygonaceae	1	3	–	3	–	–	3
Səpəng	Goatsbeard	<i>Tragopogon</i> spp.	Asteraceae	1	2	–	3	–	–	1
Mandək	Astrodaucus	<i>Astrodaucus orientalis</i> (L.) Drude, <i>Chaerophyllum</i> spp., <i>Anthriscus nemorosa</i> (Bieb.) Spreng.	Apiaceae	1	–	–	2	–	–	–
Ghəmi, mandək	Chervil	<i>Chaerophyllum</i> spp.: <i>Ch. bulbosum</i> L.	Apiaceae	1	–	–	2	–	–	–
Pekhask	Sickleweed	<i>Falcaria vulgaris</i> Bernh	Apiaceae	1	2	–	2	–	–	3
Sarzar	–	<i>Chamaescidium acaule</i> (Bieb.) Boiss.*	Apiaceae	3	3	–	1	–	–	2
Səlməsk	Goosefoot	<i>Chenopodium</i> spp.: <i>Ch. album</i> L., <i>Ch. sosnovskyi</i> Kapell.*	Chenopodiaceae	1	2	–	2	–	–	–
Səlkək	Amaranth	<i>Amaranthus</i> spp.: <i>A. retroflexus</i> L.	Amaranthaceae	1	2	–	2	–	–	–
Siptəkək	Star-of-Bethlehem, bluebells	<i>Ornithogalum transcaucasicum</i> Misch. ex Grossh.*, <i>Muscari sosnovskyi</i> Schchian*	Liliaceae	1	2	–	2	–	–	–
Alagyaz	–	<i>Puschkinia scilloides</i> Adam.	Hyacinthaceae	1	2	–	–	–	–	–
Nanchəvik	Shepherd's-purse	<i>Capsella bursa-pastoris</i> (L.) Medik.	Brassicaceae	1	2	–	2	–	–	1
Təvratoushk	Hill mustard, wild mustard	<i>Bunias orientalis</i> L., <i>Sinapis arvensis</i> L.	Brassicaceae	1	2	–	–	–	–	1
Raske ruyi	Wild spinach	<i>Spinacia oleracea</i> L., <i>Chenopodium foliosum</i> Aschers.	Chenopodiaceae	1	2	–	2	–	–	–
So	Hogweed	<i>Heracleum trachyloma</i> Fisch. & C.A.Mey.	Apiaceae	2	–	–	–	–	–	3
Zhakh	–	<i>Cachrys microcarpa</i> M. Bieb.	Apiaceae	–	–	–	–	–	–	–
Sirmi	Wild garlic (generally)	<i>Allium</i> spp.: <i>A. vineale</i> L.*, <i>A. schoenoprasum</i> L., <i>A. pseudostrictum</i> Albov <sup>†</sup> , <i>A. sativum</i> L.	Alliaceae	–	–	–	–	3	–	2
Kolirka panir, javrashk	Buttercup	<i>Ranunculus</i> spp.: <i>R. oreophilus</i> Bieb.*, <i>R. brachylobus</i> Boiss. et Hohen.*, <i>R. repens</i> L.	Ranunculaceae	–	–	–	–	–	–	–
Poung	Mint	<i>Mentha</i> spp.: <i>M. longifolia</i> (L.) Huds.	Lamiaceae	–	–	–	–	1	–	2
Jantri	Thyme	<i>Thymus</i> spp.: <i>Th. kotchyanus</i> Boiss. & Hohen., <i>Th. collinus</i> M. Bieb., <i>Th. eriophorus</i> Ronn.*, <i>Th. fedtschenkoi</i> Ronn.*, <i>Th. rariflorus</i> K. Koch., <i>Th. transcaucasicus</i> Ronn.	Lamiaceae	–	–	3	–	3	–	–
Ramashka	Chamomile	<i>Anthemis cotula</i> L.*, <i>Tripleurospermum parviflorum</i> (Willd.) Pobed.*, <i>Tripleurospermum</i> spp. and other species of Anthemideae Cass. tribe	Asteraceae	–	–	–	–	3	–	–
Zveraboy	Saint John's wort	<i>Hypericum</i> spp.: <i>H. perforatum</i> L., <i>H. linarioides</i> Bosse*	Hypericaceae	–	–	–	–	–	–	–
Pijok	Edible field thistle	<i>Cirsium esculentum</i> (Siev.) C.A. Mey.*	Asteraceae	–	–	–	–	–	–	1
Tik, Tərsho	Hen and chicks, stonecrops	<i>Sempervivum transcaucasicum</i> Muirhead, <i>Sedum caucasicum</i> (Grossh.) Boriss.	Crassulaceae	–	–	–	–	–	–	1
Pejak	Alpine dock	<i>Rumex alpinus</i> Jacq.	Polygonaceae	–	–	–	–	–	2	1
Tərsho	Mountain dock	<i>Rumex alpestris</i> Jacq. <sup>†</sup> , <i>R. acetosella</i> Z.	Polygonaceae	–	–	–	–	–	–	1
Lelavk/ Lavlavk	Field bindweed	<i>Convolvulus arvensis</i> L.*	Convolvulaceae	–	–	–	1	–	–	2

Numbers in Table 1 show commonness/preferences in usage purposes, methods of preparation, used parts, and choice of gathering locations (“1” is the primary, the most common, “2” – secondary, “3” – tertiary, and “4” – the least common).

\* Rarely or superficially mentioned in literature [9–20, etc.].

† Recorded as used plant for the first time.

Usage purposes and preparation				Used parts			Gathering locations					
Pickled, nutritional & flavoring	Cheese and curd flavoring and decorating	Tea	Medicine	Leaves and other green parts of the plant	Flowers	Roots, bulbs, and other underground parts	Home-yards, surroundings of houses, temporary stations, and villages	Crops fields	Previously grazed areas	Corral for livestock	Other human and livestock affected areas	Natural econiches with minimal human impact
–	–	–	4	1	–	–	1	1	3	2	2	3
–	–	–	4	1	–	–	1	2	2	2	1	3
–	–	–	3	1	–	–	1	1	3	2	1	3
4	2	–	4	1	–	–	2	3	2	2	1	2
–	–	–	–	1	2	–	2	1	–	–	2	1
1	3	–	–	1	–	–	–	1	–	–	3	2
1	3	–	–	1	–	–	–	1	–	–	3	2
2	–	–	–	1	–	–	–	1	–	–	2	3
–	1	–	–	1	1	–	–	–	1	–	–	1
–	–	–	–	1	–	–	1	1	–	1	1	–
–	–	–	–	1	–	–	1	1	–	1	1	–
–	–	–	–	1	–	–	–	–	1	–	–	1
–	–	–	–	1	–	–	–	–	–	–	–	1
–	–	–	–	1	–	–	1	1	–	–	2	–
–	–	–	–	1	–	–	–	2	–	1	2	–
1	–	–	–	1	–	–	–	–	–	–	2	1
1	–	–	–	1	–	–	–	–	–	–	2	1
–	1	–	–	1	3	2	3	–	3	–	–	1
–	1	–	2	–	1	–	–	–	–	–	–	1
–	–	1	1	1	2	–	–	–	–	–	2	1
–	2	1	1	1	2	–	–	–	–	–	–	1
–	–	2	1	2	1	–	–	–	–	–	–	1
–	–	2	1	2	1	–	–	–	–	–	–	1
–	–	–	–	1	–	–	–	–	–	–	–	1
–	–	–	–	1	–	–	–	–	–	–	–	1
–	–	–	2	1	–	–	–	–	–	–	–	1
–	–	–	–	1	–	–	–	–	–	–	–	1
–	–	–	–	1	–	–	–	–	–	–	–	1
–	–	–	2	1	–	–	–	–	–	–	–	1
–	–	–	–	1	2	–	1	2	–	–	2	–



**Fig. 2.** Boiled mix herbal dish prepared with *səlmask* (goosefoot, *Chenopodium* spp.) and *səlkok* (amaranth, *Amaranthus* spp.). A couple of eggs, some butter, and salt were added. Derek village (N3), August 02, 2014.

Assyrians today is that various wild herbs are added both for nutritive and flavoring purposes (Table 1; Figs. 3, 4). Plants gathered to use for food or for flavoring are dried and stored in bags (Figs. 6, 7), salted (e.g., the wild onion; Fig. 9), or pickled (Fig. 8) for transportation (especially if gathered in mountains) and for preservation for wintertime use. Sometimes the same herbs used in a fresh state or cooked are used to prepare pickles as well (Fig. 8), but there are edible herbs almost exclusively used in a pickled state (e.g., “so”: hogweed, *Heracleum trachyloma*; “zhakh”: *Cachrys microcarpa*; Table 1). The primary goal of pickling is to conserve and store the herbs for later and wintertime use, but people often use them immediately, in salads.

Wild herbs used for flavoring purposes are widely utilized amongst the Yezidis and Kurds of Armenia. They are added to soups (including *gərar*: the yogurt soup), porridges, or other dishes. In terms of frequency and scale, the most commonly used herbs are mint (*pung*) and thyme (*jantri*), both used for flavoring. Adding flavoring herbs to food is common also for Armenians.

Wild herbs also are used by the Yezidis and Kurds to flavor cheese (Figs. 8, 10)<sup>9</sup> and curd (Fig. 11). In general, practically all Yezidis and Kurds engaged in animal breeding and production of milk products use wild herbs to flavor cheese and curd, while not many Armenians do so. The main flavoring used by the Yezidis and Kurds for cheese is *sirmi* (wild garlic; Figs. 8, 10); certain species of *Allium* genus are used (Table 1). Although the usage of wild garlic in cheese and curd is explained as flavoring, we propose that it plays a secondary role as a suppressant of the pathogenic microflora that can grow in these products. Yellow flower petals of several buttercup species (*Ranunculus* spp.; Table 1) are gathered by some Yezidis and Kurds of Armenia to use in cheese for flavoring, coloring, and also simply for decoration (Fig. 10). We have not recorded this use of buttercup amongst other ethnic groups of Armenia. As the Yezidis and Kurds mentioned during interviews, this practice of using buttercup petals in cheese was more common in the past and few people use them currently.

<sup>9</sup> “Kurdish (including Yezidi - RH) cheese is known, it is prepared from milk and various herbs”, H. Arakelyan, 1898 [22].



**Fig. 3.** Yezidi woman preparing *gərar* (yogurt soup with cereal grains and wild herbs) with a mixture of *tərsho* (*Rumex crispus*), *tolək* (*Malva pusilla*), *pung* (*Mentha longifolia*), and *lelavk* (*Convolvulus arvensis*). Shamiram village, June 12, 2014.

During the past few decades (and maybe in earlier times as well) coffee is by far the most preferred hot drink for the Yezidis and Kurds of Armenia but, according to interviews, teas with various wild herbs are still widely in use. This refers especially to those herbs which have general curative and refreshing features (as characterized by the informants) such as thyme, mint, chamomile, and hypericum<sup>10</sup> (Table 1).

Armenians and other ethnic groups in the region have also practiced the gathering of various wild plants and still do it in varying scales and forms [9,11–13,26,27]. However, the essential scale of gathering and use of wild plants in food, especially in milk products, by Kurds (and Yezidis) was notable since the end of the 19<sup>th</sup> century [22,25].

It is noteworthy that the Yezidis are so closely linked to the useful wild plants growing in mountainous areas that they sometimes even carry them over to their farmyards, where they plant and cultivate them. Mostly mint and curly dock were observed to have been gathered from wild contexts and cultivated in yards.

The “plants of the mountains” are also among the “migrating food” assemblage of Armenia. The Yezidis and Kurds send packages of wild plants to their relatives living abroad (recent migrants living in Russia, Germany, France, Austria, The Netherlands, Belgium, and other countries).

### 3.1. Yezidi food taboos

There are some food products that are forbidden for the Yezidis due to certain religious rules, prejudices, or folk customs. These restrictions have an effect on the Yezidis traditional food menu and agriculture. It is written in the Yezidi holy Black Book (some informants refer this as the Black Bible) that lettuce (*Lactuca sativa* L.), common bean (*Phaseolus* spp.), pumpkins (*Cucurbita pepo* L.), bamia (okra or “lady’s fingers”, *Abelmoschus esculentus* (L.) Moench), cabbage (*Brassica oleracea* var. *capitata* L.), as well as the meats of fish, deer, and rooster are forbidden for Yezidis. Particularly in the case of lettuce, it is written that the Yezidis should

<sup>10</sup> For chamomile and hypericum none of the Yezidis and Kurds we asked knew the Kurmanji name, all of them used Russian names, correspondingly *ramashka* and *zveraboy*.



**Fig. 4.** Gərar, yogurt soup prepared by Yezidi woman in a high mountainous (~2,850 m above sea level) temporary pastoral station on Mount Aragats. An alpine plant, sarzar (*Chamaescadium acaule*) used, July 10, 2014.



**Fig. 5.** Kərchik, porridge with bread wheat grains and nanjək (*Polygonum arenastrum*). Sipan village, July 27, 2014.



**Fig. 6.** Dried leaves' braids of siptəkuk (Star-of-Bethlehem, *Ornithogalum* sp., and/or bluebell, *Muscari* sp.; in the left hand) and tərsho (curly dock, *Rumex crispus*; in the right hand). Sorik village (N2), June 14, 2015.



**Fig. 7.** Kurdish women trading in gathered edible plants along the road of Alagyaz village (June 21, 2014). In this case, tərsho (curly dock, *Rumex crispus*) fresh leaves' braids are packed spiral-like, and mandək (*astrodaucus*, *Astrodaucus orientalis*, and *Chaerophyllum* spp.) aerial parts are in large casseroles with water.

not even live in the places where lettuce is cultivated [1]. This list of taboo food products is not fully known amongst Armenian Yezidis. For example, Aristova [28] notes that the pig (pork) and cabbage are strictly forbidden (*haram*<sup>11</sup>) for Yezidis, but other food products from the above list are not mentioned. During our fieldwork we encountered a similar situation, in that the only conventionally constant food taboos were pork and cabbage;

<sup>11</sup> “*Haram*” is an Arabic term meaning sinful.



Fig. 8. Pickles of pekhasak (sickleweed, *Falcaria vulgaris*) and sheep cheese flavored with jantri (thyme, *Thymus* sp.). Gyalto village, June 03, 2015.

extremely few Yezidis ever heard about forbidden foods other than pork and cabbage and were using even those upon availability. Although practically all Yezidis say that the pig and cabbage<sup>12</sup> are strictly forbidden for them, some Yezidis, especially murids<sup>13</sup> ignore this religious rule and eat pork and cabbage. It worth mentioning that the Yezidis are generally more strict about the use of pork and pork-containing products (e.g., sausage) than they are in the case of cabbage. The degree of food strictness depends on caste ascription and the degree of religiosity of a given family: we observed various cases, which have virtually equal occurrences. In some cases pork, cabbage, and even plants resembling or related to cabbage, such as cauliflower (*B. oleracea* var. *botrytis* L.) and lettuce (*Lactuca sativa* L.), are strictly forbidden for the family and it is considered a sin even to bring those plants into the yard<sup>14</sup> or to touch them or pork/pigs. In some other cases Yezidis are less strict about cabbage and other taboo plants; they deal with it outside of their homes, and sometimes even cultivate it in their yards to sell in the market, but they do not eat it. And finally, there are families which freely cultivate cabbage and lettuce and use it for everyday meals, but refrain from eating it during religious celebrations such as weddings, funerals, etc. (as in the case when Christians do not use meat during Easter). These informants, exclusively murids, said that the cabbage is forbidden only for religious castes, pirs, and sheikhs, but murids are allowed to use it. Some of the informants mentioned that the common bean is also forbidden for Yezidis, but did not explain or relate the history of such a taboo. Some informants said that cannabis (*Cannabis sativa* L.) is forbidden for Yezidis, because it has narcotic

features. Some others consider the sunflower (*Helianthus annuus* L.) as a forbidden plant, because one spits the peels when eating the seeds. However, these stories about lettuce, beans, hemp, and sunflower being forbidden for Yezidis are episodic cases; most of our informants never heard about any forbidden plants other than cabbage, consider these stories funny, and relate examples of using such apparently forbidden plants.



Fig. 9. Chopped and salted herbs of sirimi, wild garlic (*Allium* spp.), to be used in special cheese preparation. Oshakan village, November 11, 2014.

<sup>12</sup> During our interviews, the Yezidis gave several explanations why the pig and cabbage are considered "haram." These explanations can be grouped in two versions: religious/mythological and historical. According to the religious explanation, pigs and cabbage are considered "haram" because the Yezid (Malak Tawus according to another subversion) when running from persecutors hid in a cabbage garden, where the cabbage leaves betrayed him with their crunch. According to this version, pigs were also present in the cabbage garden, and they participated in the betrayal with their grunting (according to another version they just entered the cabbage garden, ate cabbage, and consequently became as "haram" as cabbage). According to a possible historical version introduced by some informants, the Yezidis contrived and declared the cabbage as "haram" as an excuse for refusing to serve in the Turkish army, where the food of the soldiers was prepared using cabbage. Incidentally, Malak Tawus is the main angel of the Yezidis, who appears in the form of a peacock [3].

<sup>13</sup> Yezidis are divided into three castes: religious leaders, sheikhs and pirs, and regular people, murids. Marriages between these castes are strictly forbidden.

<sup>14</sup> We recorded a case of a street trader, an Armenian who did not know about these religious restrictions, who drove a car loaded with cabbage into the yard of a Yezidi family in Zovuni village and there was a scandal because of it.





**Fig. 10.** Cheese flavored with chopped herbs of sirmi, wild garlic (*Allium* spp.), and petals of kolirka panir (translated as “yellow flower”, buttercup, *Ranunculus* sp.). Temporary pastoral station in the mountains of “Jermuk” (E, N2), July 20, 2014. In this case, the cheese is stored in salty water in 200-L plastic cans.



**Fig. 11.** Curd with nanjuk (common knotgrass, *Polygonum arenastrum*) prepared in a temporary pastoral station on the southern slopes of Mount Aragats for family use and to sell. Oshakani oba (A, N3), July 05, 2014.

As might be expected, these religious restrictions also affect the agricultural practice of the Yezidis. We have not seen any Yezidi family keeping pigs and few families (proportionally compared with Armenians) cultivate cabbage and other forbidden plants. Regarding traditional cuisine, meat-based dishes primarily contain lamb and mutton (meat of sheep of various ages), to a lesser degree beef or chicken, and never pork. In the regionally traditional dishes and food where cabbage is used (e.g., *tolma/dolma*<sup>15</sup>, *karchik*, pickles, etc.) Yezidis replaced cabbage with other, usually wild, plants (Table 1). For example, the leaves of the grape when available, or leaves of wild plants in the mountains such *Rumex alpestris* and *Rumex alpestre* are used to roll *tolma* by religious Yezidis or

during the period of religious celebrations. In the case of *karchik*, Yezidis use mostly knotgrass (*Polygonum aviculare*), while Armenians often use cabbage. Regarding pickles in Armenia, presently cabbage is the main component of pickle for Armenians and Russians, while Yezidis prefer wild gathered plants (Table 1) or just other vegetables.

Summarizing the results of our research we can attest that traditional Yezidi and Kurdish cuisine is rather simple. The majority of traditional dishes are based on animal products (meat, milk, yogurt, cheese, curd, etc.) and cereals (mostly bread wheat). However, there are also many dishes based on edible wild plants, which were not known to the scientific community and have not been previously highlighted. The main components of Yezidi and Kurdish traditional dishes in Armenia—meat, milk, yogurt, cheese, curd, cereals, and wild herbs—show the primary foci of their traditional agrarian economy and livelihood. The main occupation of the Yezidis and Kurds living in Armenia has been, and for the majority still is, sheep herding. To satisfy nutritional needs for vegetal material and hydrocarbonates in general, transhumant Yezidis and Kurds had to engage in barter or trade, or at least practice cereal-based agriculture. According to oral history and current practice, intensive plant gathering has “always” been part of these people’s household economy and is considered by them as something *a priori*. Traditional foods with vegetal components, which are still cooked in villages by Yezidis and Kurds, and the methods of preparation of certain food products (yogurt soup, cheese, curd, etc.) using vegetal components serve as cultural metaphors for these people and can be considered as part of their identity.

Contrary to stereotypes persisting in Armenian and Russian societies and even in the Yezidi community itself, we observed that animal husbandry is not the only way for Yezidis to produce food products. Yezidis practice agriculture and prepare traditional dishes based on diverse vegetal material. Dishes prepared using cultivated plants generally repeat the forms of Armenian variants (as occurs with Georgian Yezidis and Georgian variants). Meanwhile, traditional Yezidi dishes prepared using plants gathered from the wild are often original and only partly overlap with Armenian traditional dishes.

### Conflicts of interest

All contributing authors declare no conflicts of interest.

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<sup>15</sup> Tolma is chopped meat, sometimes with rice, rolled in mainly cabbage or grape leaves.

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