

# Herbal and Food Folk Medicines of the *Russlanddeutschen* living in Künzelsau/Taläcker, South-Western Germany

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**An urban ethnobotanical study was carried out among a community of *Russlanddeutschen* (Germans from Russia) who in recent years have moved from Russia and Central Asia to Künzelsau, a small town located in Württemberg, in South-Western Germany. Thirty-six in-depth interviews were conducted with the women in this community, and 62 homemade medicinal preparations derived from 46 botanical species were recorded. As well as common medicinal plant uses that are well known in modern evidence-based German and Western European phytotherapy, we were able to record traces of the community's Russian and Central Asian (Turkic) heritage through the very popular use of sorrel as a depurative or for preventing and treating colds and flu; the use of dill as a digestive; watermelon as a diuretic; birch to relieve rheumatism and arthritis; buckwheat as a tonic; rye-based fermented beverages as a stimulant and as a depurative, diverse berries to prevent colds and flu; coriander as a digestive, and other medicinal foods. Traces of archaic German preparations were also recorded, which were probably Swabian in origin. Nearly half of the overall quoted items represented folk functional foods. The researchers believe that the findings in this study could stimulate public health policies aimed at improving both the phyto-pharmacovigilance of lesser-known herbal drugs, and the health and well-being of migrants by promoting a better understanding of *emic* health beliefs and newcomers' healing strategies. Copyright © 2008 John Wiley & Sons, Ltd.**

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## INTRODUCTION

Studies of herbal remedies in traditional and complementary and alternative medicines (TCAMs) have considered with increasing interest in the recent years ethnobotanical and medical folk knowledge, and the practice of making and using 'home medicines'. Medicinal plant uses that have been handed down through several generations could also have an important role in the development of new phytomedicines (Heinrich, 2000), as well as providing a better understanding of pluralistic concepts of health (Bok, 2004) and women's role in the provision of healthcare within domestic arenas (Howard, 2003).

Migrations and diasporas offer wonderful arenas for ethnomedical studies, as they present a unique opportunity to analyse how traditional/folk herbal knowledge and practices change over time and place (Pieroni and Vandebroek, 2007). Following on from pioneering research on the urban medical ethnobotany of Latinos

in New York City (Balick *et al.*, 2000; Reiff *et al.*, 2003), ethnobiological studies of this kind have recently been conducted in Europe. So far these have involved only Turkish migrants in Germany (Pieroni *et al.*, 2005) and South-Asian and Latino communities in England (Aslam, 1979; Sandhu and Heinrich, 2005; Pieroni *et al.*, 2007, 2008; Ceuterick *et al.*, 2007; Pieroni and Torry, 2007).

In contrast, much less research has been done regarding folk herbal and medical practices among inter-European migrants, especially in relation to the very recent phenomenon of Eastern European newcomers moving into Western Europe. For this reason, the history of the *Russlanddeutschen* is very interesting. The *Russlanddeutschen* are descendants of ethnic Germans who migrated to Russia between the 17th and 18th centuries, and who have themselves migrated back to Germany in the past decade after the collapse of Communism in the former Soviet Union, hence they provide researchers with an opportunity to analyse hybridizations that can occur in herbal folk knowledge, and a chance to acquire a better understanding of the use of Eastern European and Central Asian medicinal plants in Western Europe.

Accordingly, the aims of this study were as follows: (i) to record traditional herbal medicines among the *Russlanddeutschen* living in the settlement of Künzelsau/Taläcker, in south-western Germany; (ii) to analyse existing literature on German, Russian and Siberian folk herbal medicines to find out about the possible

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traces/origins and rationale regarding the use of the quoted items; and (iii) to briefly discuss how cultural adaptation processes have influenced the perceptions that *Russlanddeutschen* have of their herbal remedies.

## BACKGROUND AND METHODS

**Ethnographic and historical background.** The *Russlanddeutschen* are the descendents of a wave of migrants who left Germany to go and live in Russia, starting in 1763 when Catherine the Great proclaimed a policy of open immigration for foreigners wishing to live in the Russian Empire (Ingenhorst, 1997; Eisfeld, 1999). The German immigration was motivated partly by religious intolerance, particularly for the Mennonite minority and partly by warfare in central Europe and prolonged difficult economic conditions. Catherine the Great's declaration freed German immigrants to Russia from military service, which was imposed on native Russians, and from most taxes. It also placed the new arrivals outside of Russia's feudal hierarchy, and granted them considerable internal autonomy. German colonization was most intense in the lower Volga, but other areas were targeted as well. In 1803, Catherine II's grandson, Tsar Alexander I, reissued her proclamation, and in the chaos of the Napoleonic wars, the response from Germans was enormous. Germans also settled in the Caucasus area from the beginning of the 19th century, and in the 1850s they expanded into Crimea. In the 1890s, new German colonies opened in Altai in Russian Asia. In the first census of the Russian Empire in 1897, about 1.8 million respondents reported to be ethnic Germans.

The decline of Russia's German community started with the reforms of Alexander II, who in 1871 repealed the open door immigration policy of his predecessors, effectively ending any new German immigration into the Empire. The Russian nationalism that took root under Alexander III served as a justification for the elimination in 1871 of the bulk of the tax privileges enjoyed by Russian Germans, and after 1874 they were subjected to military service. The resulting disaffection motivated many Russian Germans, especially members of traditionally dissenting churches, to migrate to the United States and Canada. After 1881, Russian Germans lost all their remaining special privileges, and were required to study Russian in school. During World War I, when Russia started suffering military defeats many Russian Germans were exiled to Siberia as enemies of the state. When Nazi Germany broke the Molotov-Ribbentrop Pact by invading USSR in 1941, Russia's German population was almost entirely banished to Kazakhstan, Altai and other remote areas. A few of those who remained in European Russia followed the German army in its retreat in 1943 and 1944, and remained in Germany after WWII. Others immigrated to Canada, the United States (North Dakota) and Latin America. In November 1948, Stalin declared that Russia's Germans were permanently forbidden from returning to Europe, and even when this declaration was rescinded after his death in 1953, the post-Stalin Soviet state made no effort to create ethnic national institutions for *Russlanddeutschen*, so this group of

over a million was quietly assimilated into mainstream Russian society over the next two generations. There were approximately two million ethnic Germans in the Soviet Union in 1989 when the Soviet Union collapsed, and large numbers of these *Russlanddeutschen* took advantage of the opportunity to return to Germany (100 000 to 200 000 yearly). At the end of 2004, the estimated number of *Russlanddeutschen* in Germany was two and half million people (Schneider, 2005).

From 1993 onwards, a population of 3000 *Russlanddeutschen* (*Spätaussiedler*), who moved mainly from the Ural region and Siberia, settled in the small town of Künzelsau. Künzelsau consists of approximately 15 000 inhabitants in all; its *Russlanddeutschen* (*Spätaussiedler*) community have settled in Taläcker, a district that was created for them in a rather ad hoc way by the local authorities.

**Method.** The fieldwork in this study was conducted over a period of 14 months from April 2004 through July 2005 in Künzelsau/Taläcker, Württemberg, South-Western Germany (Fig. 1). Thirty-six women aged between 46 and 81 years were selected using snowball techniques and interviewed in depth about their traditional homemade medicines. Prior informed consent (PIC) was obtained verbally before beginning each interview. Ethical guidelines adopted by the AAA/American Anthropological Association (1998) and by the ICE/International Society of Ethnobiology (1998) were rigorously followed. All interviews, which were carried out in the German language, were audio recorded. Quoted plant items were identified using

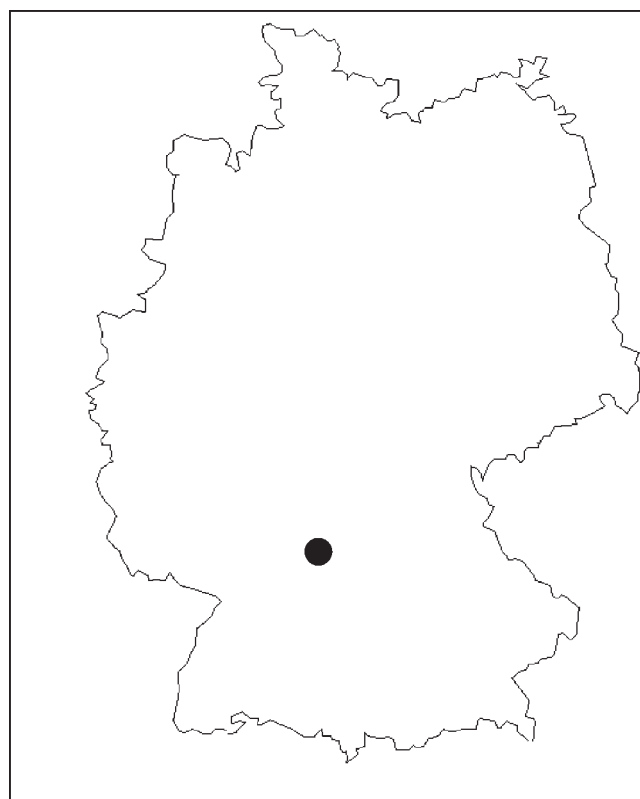


Figure 1. The location of study area (Künzelsau/Taläcker).

standard works on German flora (Schmeil *et al.*, 2006) or, for cultivated species, *Mansfeld's Encyclopedia of Agricultural and Horticultural Crops (Except Ornamentals)* (Hanelt, 2001) and *Franke's Atlas of Economic Plants* (Franke, 1997). Folk names were transcribed using the rules of German phonology.

Specific information about food and medicinal ingredients was sought using classical means of ethnobotanical investigation (Alexiades and Sheldon, 1996; Cotton, 1996); i.e. participants were asked at the beginning to free-list traditional herbal medicines they use or have used in their households in the past. 'Traditional' was defined as those ingredients that interviewees perceived to be part of their cultural heritage, and that they had known and used for at least one generation. For each quoted item, they were asked for the exact details of processing, administration and claimed medicinal properties.

## RESULTS AND DISCUSSION

### The origins of herbal and food folk medicines of the *Russlanddeutschen*

Table 1 presents all the herbal medicines quoted by the interviewees. In all, 62 different homemade preparations were recorded corresponding to 46 botanical taxa.

Figure 2 summarizes the possible origins of the quoted herbal medicines. These were classified using standard works that refer to German (Marzell, 1938; Pahlow, 1993), Russian and Siberian herbal folk medicines and phytotherapy (Krebel, 1858; Demitsch, 1889; von Heinrici, 1894; Kobert, 1896; Mamedov *et al.*, 2004; Mamedov and Craker, 2001).

While a few of the quoted remedies are very common in modern German and Western European phytotherapy (Bühring, 2005; Fintelman and Weiss, 2006), others are probably Russian in origin. This may be the case regarding the very frequent use of sorrel as a depurative and for preventing and treating colds and flu; the use

of dill as a digestive; lacto-fermented watermelons and cucumbers as a diuretic; birch branches to alleviate rheumatism and arthritis; buckwheat as a tonic; rye-based fermented beverages as a stimulant and a depurative; and Sauerkraut and diverse berries for preventing colds and flu.

### Lacto-fermented food-medicines

Lacto-fermentation of many wild and cultivated vegetables and even fruits and cereals has represented a crucial part of the food and medicinal cultural heritage of Central and especially Eastern European and Siberian populations, as the Swiss-Polish economic botanist Adam Maurizio described. Holding the Chair in Botany at the Technical University of Lviv, in today's Ukraine, for many years he conducted in-depth research and described uses of plants from prehistory to the 1930s (Maurizio, 1927).

Nowadays in most Western European countries only cabbage is still lacto-fermented to produce Sauerkraut and its related juice (widely sold for food and medicine in many 'health' food shops), in rural Eastern Europe most vegetables are still preserved using this archaic processing method, which lead both to ferment and eventually light alcoholic foods and beverages.

We briefly illustrate in the following paragraphs a few of the most interesting Eastern European fermented foods and beverages, which have been quoted by our informants, and described by Adam Maurizio in 1927.

### Sauerkraut

Sauerkraut was mentioned by the interviewed informants as an important home medicine for treating flu and liver diseases. Whilst considered in the modern era (or by non-initiates to this food form) *sauerkraut* is most likely to be thought of as the solid product from the vegetable elements. However, the liquid was and is equally valued amongst Eastern European communities. According to Maurizio it was appreciated by Central and Eastern Europeans with special mention of the Bulgarians. He reports that they drank the liquid as it was cold, hot or as a soup. Ancient methods involve the whole head of cabbage being preserved in its entirety and the use of lacto-fermentation. In Romania one method involved taking 50 whole cabbages to ferment by placing them in a barrel, filling it with 10 L of water and 3 kg of sea salt and then weighing them down with a wooden lid and a heavy piece of stone.

Previously, Maurizio recorded similar preparation methods used with apples, potatoes, beans and other plants. In Poland *sauerkraut* is described as being made with red beets, including the leaves. Russian *sauerkraut* is described as containing common thistle (*Cirsium vulgare*), salsify (*Tragopogon* spp.), ground elder (*Aegopodium podagraria*), plantain species (*Plantago latifolia*), horseradish (*Armoracia rusticana*) leaves, hop (*Humulus lupulus*) shoots and many other wild herbs along with leeks, onions and edible bulbs.

The *Russlanddeutschen* have apparently also maintained the tradition and still preserve water-melons, cucumbers, tomatoes, damsons and apples via lacto-fermentation.

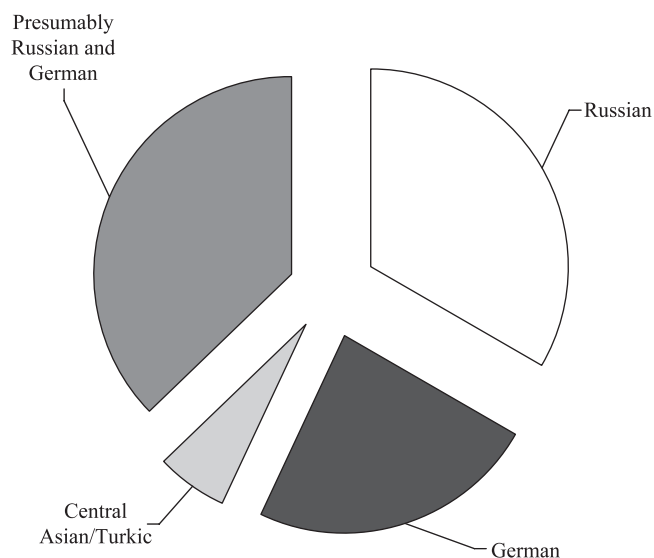


Figure 2. Origin of the quoted herbal and food medicines.

Table 1. The herbal medicines quoted by the *Russlanddeutsche* in Taläcker/Künzelsau

Botanical taxon and family	English name	Recorded folk name	Plant part	Availability	Plant part(s) and preparation	Claimed medicinal use	Quotation frequency
<i>Aegopodium podagraria</i> L. (Apiaceae)	Bishop's weed	Giersch	Leaves	Gathered from the wild in the past	Consumed raw in salads	Depurative	*
<i>Allium cepa</i> L. (Alliaceae)	Onion	Zwiebel	Bulbs	Grown in home gardens, or bought in local shops	Chopped, cooked with sugar into a syrup	Cough treatment	+
<i>Allium schoenoprasum</i> L.? (Alliaceae)	Wild chives	Wikilu	Leaves	In the past, gathered from the wild.	Consumed raw in salads, or cooked in soups or pies. Also preserved via lacto-fermentation (with salt) and consumed throughout the year	Depurative	*
<i>Allium ursinum</i> and <i>A. victorialis</i> (?) (Alliaceae)	Ramsons	Bärlauch/ Tschirimscha	Leaves	Grown in home gardens, gathered from the wild, or bought in local shops.	Consumed raw in salads, or cooked in soups or pies. Also preserved via lacto-fermentation (in salt) and consumed throughout the year	Depurative	++
<i>Aloe barbadensis</i> Mill., (Asphodelaceae)	Aloe	Aloi	Leaf juice	Grown as house plants.	Applied externally	To treat wounds	+
<i>Anethum graveolens</i> L. (Apiaceae)	Dill	Dill/Ukrop	Aerial parts	Grown in home gardens, or bought in local shops	Seasoning	Digestive	+++
<i>Armoracia rusticana</i> P. Gaertn., B. Mey. & Scherb (Brassicaceae)	Horseradish	Meerrettich/Hren	Roots	Grown in home gardens, or bought in local shops	Seasoning	To prevent or treat respiratory troubles	+
<i>Atriplex patula</i> L.? (Chenopodiaceae)	Wild orache	Marbella/Lebeda	Leaves	In the past, gathered from the wild.	Consumed raw in salads, mixed with flour and baked into bread, boiled	Depurative	*
<i>Beta vulgaris</i> L. subsp. <i>vulgaris</i> convar. <i>vulgaris</i> var. <i>vulgaris</i> (Chenopodiaceae)	Red beet	Rote Bete	Roots	Grown in home gardens, or bought in local shops.	Used in home-made <i>Borschtsch</i> : a soup based on boiled red beets, along with meat and vegetables, legumes or herbs (usually carrots, tomatoes, potatoes, beans, dill, parsley), with sour cream added before serving	To treat and/or prevent flu during the winter; as a 'strengthening' food.	+++
<i>Betula</i> sp. (Betulaceae)	Birch	Birke	Sap	In the past, gathered from birch trees in the forest; nowadays sap-based beverages are bought in local shops.	Drunk	To treat flu and abdominal pains	+

Table 1. (Continued)

Botanical taxon and family	English name	Recorded folk name	Plant part	Availability	Plant part(s) and preparation	Claimed medicinal use	Quotation frequency
<i>Brassica oleracea</i> L. (Brassicaceae)	Cabbage	Kohl	Branches Leaves	In the past, gathered from the wild. Grown in home gardens, or bought in local shops	Used to beat naked shoulders and chest Used in homemade <i>Schchi</i> : a soup made with potatoes and onions Processed (fermented) into sauerkraut ( <i>Sauerkraut/Kapusta</i> ), which is consumed raw or cooked Macerated in vodka for a few weeks and then applied externally Made into a tea with black pepper added Made into a tea	To treat flu, rheumatism and arthritis Diuretic  To treat flu; 'good for the liver'	* +
<i>Calendula officinalis</i> L. (Asteraceae)	Pot marigold	Ringelblume	Flowers	Gathered from the wild.		To treat arthritis	+
<i>Carum carvi</i> L. (Apiaceae)	Caraway	Kümmel	Seed heads	Bought in local shops		Digestive or to treat coughs	+
<i>Chelidonium majus</i> L. (Papaveraceae)	Greater celandine	Schöllkraut/ Tschistiel	Leaves Leaf juice	In the past, gathered from the wild. In the past, gathered from the wild.		Depurative	*
<i>Citrullus lanatus</i> (Thumb.) Matsum. et Nakai (Cucurbitaceae)	Water melon	Wassermelone	Fruit	Grown in home gardens, or bought in local shops	Consumed raw or preserved via lacto-fermentation (using the same procedure as described for tomatoes) and consumed throughout the year As seasoning in many mutton- or lamb-based dishes	To treat wounds 'Blood cleansing'	* +++
<i>Coriandrum sativum</i> L. (Apiaceae)	Coriander	Koriander	Leaves and seed heads	Grown in home gardens, or bought in local markets		Digestive	+
<i>Crataegus</i> sp. (Rosaceae)	Hawthorn	Weißdorn	Aerial parts	In the past, gathered from the wild	Applied externally on the forehead	To treat headaches	*
<i>Cucumis sativus</i> L. (Cucurbitaceae)	Cucumber	Gurke	Fruit	Grown in home gardens, or bought in local shops	Consumed raw in salads or lacto-fermented (using the same procedure as described for tomatoes) and consumed throughout the year Used in homemade dishes; the young shoots are cooked in soups or as a filling for pies	'Blood cleansing'	+++
<i>Equisetum arvense</i> L. (Equisetaceae)	Horsetail	Schachtelhalme/ Hvosch	Fertile stems	In the past, gathered from the wild		Depurative	*

Table 1. (Continued)

Botanical taxon and family	English name	Recorded folk name	Plant part	Availability	Plant part(s) and preparation	Claimed medicinal use	Quotation frequency
<i>Fagopyrum esculentum</i> Moench. (Polygonaceae)	Buckwheat	Buchweizen	Seeds	Bought in local shops	Used in homemade porridge called <i>Buchweizenbrei</i>	To counteract diabetes	++
<i>Helianthus tuberosum</i> L. (Asteraceae)	Topinambur	Tapinambur	Tubers	Bought in local markets	Consumed cooked	To counteract diabetes	+
<i>Humulus lupulus</i> L. (Cannabaceae)	Hop	Hopfen	Aerial parts	In the past, gathered from the wild	Applied externally in compresses	To stop hair falling out	*
<i>Hypericum perforatum</i> L. (Hypericaceae)	St. John's Wort	Sweraboj	Flowering tops	In the past, gathered from the wild, or bought in the local markets	Made into a tea	Depurative	*
<i>Lycopersicon esculentum</i> Mill. (Solanaceae)	Tomato	Tomate	Fruit	Cultivated in home-gardens (along with special cultivars, such as black tomatoes, originally from the Ural region)	Preserved via lacto-fermentation in water with salt, adding mustard and pepper seeds, dill leaves and/or infrutescences, bay leaves, and a variety of leaves, such those of horseradish, cherry, oak, apple, black currant, blackberry, and gooseberry. After the tomatoes are consumed, the remaining liquid is then drunk	To treat headaches due to drunkenness	++
<i>Malus domestica</i> Borkh. (Rosaceae)	Apple	Apfel	Fruit pulp	Grown in home gardens, or bought in local shops	Pulped and then consumed; rarely still lacto-fermented and consumed during the year	To treat diarrhoea; depurative	+
<i>Matricaria recutita</i> (L.) Rauschert (Asteraceae)	Chamomile	Kamille	Flowering tops	Bought in local shops	Used in homemade Swabian <i>Schnitzsuppe</i> : a sweet soup based on dried apple slices, served with dumplings ( <i>Krebbel</i> ), made of old bread, eggs and butter	Strengthening food	+
<i>Mentha</i> sp. (Lamiaceae)	Mint	Minze	Leaves	Bought in local shops	Tea	Digestive or to treat abdominal pains	++
					Tea	Digestive	+

Table 1. (Continued)

Botanical taxon and family	English name	Recorded folk name	Plant part	Availability	Plant part(s) and preparation	Claimed medicinal use	Quotation frequency
<i>Oryza sativa</i> L. (Poaceae)	Rice	Reis	Seeds	Bought in local shops	Used in homemade Uzbek <i>Plow</i> : rice soaked with pork meat, carrots and onions	Strengthening food	+
<i>Panicum miliaceum</i> L. (Poaceae)	Millet	Hirse	Seeds	In the past, grown in home gardens, or bought in local shops	Used in homemade porridge called <i>Hirsenbre</i>	To counteract diabetes	*
<i>Plantago lanceolata</i> L. (Plantaginaceae)	Plantain	Spitzwegerich/ Padaroschnik	Leaves	Gathered from the wild	Applied externally	To treat various skin inflammations	+
<i>Prunus domestica</i> L. (Rosaceae)	Plum	Zwetschge	Fruit	Grown in home gardens, or bought in local shops	The fruit are dried and then cooked	Laxative	+
<i>Origanum vulgare</i> L. (Lamiaceae)	Oregano	Duschiza	Leaves	In the past, gathered from the wild	Tea	Mild sedative	*
<i>Raphanus sativus</i> L. (Brassicaceae)	Black radish	Schwarzrettich/ Rietka	Root juice	Grown in home gardens, or bought in local shops	Mixed with honey or sugar	To treat coughs, especially in children	+
<i>Rheum rhabarbarum</i> L. (Polygonaceae)	Rhubarb	Rhabarber	Stems	Grown in home gardens	Roots are cut into slices and applied externally	To treat rheumatism and arthritis	+
<i>Ribes</i> spp. (Grossulariaceae)	Currant	Johannisbeeren, Stachelbeeren	Fruit	Grown in home gardens	Cooked with sugar	Depurative	++
<i>Rosa canina</i> L. (Rosaceae)	Rose hip	Hakeputten	PseudoFruit	In the past, gathered from the wild.	Eaten raw, or made into jams, syrups or fermented alcoholic beverages ('wines')	To prevent flu and colds	++
<i>Rumex acetosella</i> L. (Polygonaceae)	Sorrel	Sauerampfer/ Sauerampel/ Sauerumpel/ Schawel	Leaves	Grown in home gardens, gathered from the wild, or bought in local shops	Tea	To prevent flu and colds	*
					Consumed raw in salads; or in homemade food such as green <i>Borschtsch</i> : a soup based on sorrel leaves, with other vegetables, legumes or seasoning herbs added.	Depurative; to treat and/or prevent flu during the winter; strengthening food	+++
					Mixed with sugar and barley as used as a filling in boiled or baked Russian <i>Piroschki</i>		
					In <i>Wareniki</i> – sweet puddings made with buttermilk and flour		
			Roots	In the past, gathered from the wild for this particular purpose	Decoction	To treat diarrhoea	*

Table 1. (Continued)

Botanical taxon and family	English name	Recorded folk name	Plant part	Availability	Plant part(s) and preparation	Claimed medicinal use	Quotation frequency
<i>Rumex</i> sp. (Polygonaceae)	Dock	Halbgaul/Konski schawel	Flowers? Fruit?	In the past, gathered from the wild	Decoction	To treat diarrhoea	*
<i>Sambucus nigra</i> L. (Caprifoliaceae)	Elderberry	Flieder	Leaves Flowers	Gathered from the wild Gathered from the wild	Applied topically The flowers are macerated in vodka for a few weeks and then applied externally	To treat wounds To treat arthritis	+ +
<i>Secale cereale</i> L. (Poaceae)	Rye	Roggen	Fruit Seeds	Gathered from the wild Bought in local shops	Cooked with sugar and potato flour Used in homemade <i>Kwaß</i> : a beverage prepared by fermenting old rye bread or rye seeds with water and sugar. It is also used to dress a cold summer salads based on boiled potatoes and eggs, with cucumber, spring onions, dill and boiled meat added, garnished with yogurt/cream (Russian <i>Okroschka</i> ) The flowers are macerated in vodka for a few weeks, and used externally	To prevent and/or treat colds and flu Thirst quencher; depurative	+ ++
<i>Solanum</i> <i>tuberosum</i> L.	Potato	Kartoffel/ Kartobbel	Tubers	Grown in home gardens, or bought in local shops	Used in homemade – Swabian <i>Schupfnudel</i> : dumplings made with boiled potatoes, flour, eggs, and served with sauerkraut, meat, or apple mousse	To treat arthritis	+
<i>Stellaria media</i> L. (Caryophyllaceae)	Chickweed	Vogelmiere	Flowers	Grown in home gardens	In salads	Strengthening food	++
<i>Taraxacum</i> <i>officinale</i> Weber (Asteraceae)	Dandelion	Löwenzahn/ Udovaittsch	Aerial parts Leaf juice Leaves	In the past, gathered from the wild In the past, gathered from the wild Gathered from the wild, probably only in the past	In compresses Consumed raw in salads	Depurative To strengthen the joints# Depurative	* * */+?



Table 1. (Continued)

Botanical taxon and family	English name	Recorded folk name	Plant part	Availability	Plant part(s) and preparation	Claimed medicinal use	Quotation frequency
<i>Triticum</i> sp. (Poaceae)	Wheat→Flour	Weizen	Flowers Seeds	Gathered from the wild Grown in the past; nowadays bought in local shops	The flowers are cooked with sugar, until a jam-like paste is obtained Used in homemade <i>Mehlsuppe</i> : a soup prepared with wheat flour, butter and water Used in homemade Kazak <i>Bischmarmak</i> : egg noodles soaked in lamb or mutton soup, garnished with the same boiled meat and boiled potatoes and fresh chopped onions; In Uigur/Uzbek <i>Lagman</i> : homemade egg noodles, dressed with a sauce consisting of onions, tomatoes, potatoes, carrots, or meat In soups or teas.	To treat coughs To treat abdominal pains Strengthening food	+ * +
<i>Urtica dioica</i> L. (Urticaceae)	Nettle	Brennnessell/ Krapawa	Leaves	Gathered from the wild		Depurative, diuretic	++
<i>Vitis vinifera</i> L. (Vitaceae)	Grape→ Vinegar	Essig		Bought in local shops	Applied externally	To treat wounds	*
not identified	Wild radish?	Pustasiol	Roots	In the past, gathered from the wild	Used in homemade <i>Borschtschi</i> : a soup based on red beet or sorrel leaves, together with other vegetables, legumes or seasoning herbs In compresses	Depurative	*
	Fresh cheese	Quark		In the past, a by-product of the home cheese-making process Bought		To treat varicose veins	*
	Honey	Honig		Bought	Eaten, or applied externally to the chest Drunk	To treat sore throat and coughs Laxative	+ *
	Whey	Molke		In the past, a by-product of the home cheese-making process			

+++ very commonly quoted; ++, quoted sometimes; +, rarely quoted; \* use quoted only in relation to the past (in Russia) and no longer in practice.

### Braga, braschka or bosca

In describing *braga*, *braschka* or *bosca* Maurizio illustrates the significance of lacto-fermentation techniques used with common millet (*Panicum miliaceum*), also in terms of their possible link to the origins of bread and beer. These beverages were found in areas as widespread as old Austria, Siberia, Asia Minor and as far south and east as Egypt and Abyssinia. Made with an early domesticated and widely used plant, *braga* was one of the most common fermented beverages. In Bulgaria fine millet flour was mixed with water to make a thick porridge, which was then cooked in galvanized copper pots. It was allowed to cool and then reboiled, until it smelt slightly roasted. Two substances were added to the product to start the fermentation process; dried and ground millet seeds and an extract from chick pea (*Cicer arietinum*). High in carbohydrates and low in alcohol *braga* was the drink of all, rich and poor alike, throughout vast areas. Two main types of *braga* developed and in Romania particularly the two were described as *braga dulce* (sweet braga) and *braga acra* (sour braga). The first form is rich in lactic acid and sugar, contains living bacteria and micro-organisms and little alcohol. The second form of *braga* often had sugar and yeast added and would have a higher alcohol content. Certainly *braga* is a very ancient drink, which was used throughout a large area. More modern forms of drink sharing this name are also made with rye and illustrate the strong history of such fermented beverages, which border on the alcoholic.

### Barszcz or borscht

Investigating the history of fermented beverages prior to domestication Maurizio describes primitive forms of acid fermentation in foods and drinks, such as *barszcz*. Originally it was made from soured leaves and stems of wild-gathered *Heracleum sphondylium* and related species. The 16th and 17th century German and Swiss botanists were apparently aware of this use of these plants. He also describes how the name which was once associated with *Heracleum* species, 'barszcz', spread to denote the liquid or soup, which began to be made with other plants, such as borage (*Borrago officinalis*) and beet (*Beta cicla*). What is now most commonly known as 'barszcz' is a soup made with red beet, which was only introduced into Poland in the 16th and 17th century, replacing *Beta cicla*. In the 1660s acid products named 'barszcz' were commonly made with the red beet or soured and cooked rye flour. Similarly the name 'barszcz' or 'borscht' (in Ukraine) has been associated with many different forms of (usually fermented) soup throughout this time. During times of extreme poverty when no other plants were available 'barszcz' was made from fermented leaves and stems of clover species *Trifolium* spp. Similarly it was made from *Rumex* species, such as *Rumex acetosa*, which is known to this day by the Ukrainian community in the UK (where it is described as 'green borscht'; Gray, 2007). It was also described as being used by the *Russlanddeutschen* as a depurative and is one of the plants still widely wild-gathered in Poland (Luczaj and Szymański, 2007). According to Maurizio's account *Heracleum* species were no longer in use for this method of fermented soup production in 1932.

### Kwaß (or Kwasz)

It is of significance to note the use of the rye-based fermented beverages as a stimulant by the *Russlanddeutschen*. Kwaß (or *Kwasz*, as Maurizio described it) resembles *braga*, and is essentially a fermented dough or bread-based drink, especially using rye. It is made by taking some flour to make dough, which is then fermented. One part flour is covered in ten parts boiling water; it is then mixed and cooked for 24 h in the baker's oven. It is taken out of the fire, it can be flavoured with mint, boiling water is added again and it is left to ferment a further 24 h. It is sieved once it is ready. The fermentation process involves the yeast from the bread or dough and lactic acid. There are huge varieties of homemade *kwasz* just as there is *braga*. *Kwasz* was very popular in Slavic countries and the word became a collective word used in Russian, Polish and Czech to describe the taste that most people refer to as sour or sour-bitter. In Slavic countries *Kwasz* became the generic name for various forms of other drinks made in a similar way. These included *Geiselitz*, *Zur* and *Braga*; and all drinks that were made from fermenting grain or bread and including sauerkraut juice and drinks where it was the main feature. These drinks involved more modern cereals (like oats and rye) and had the acidity of *braga* and the preparation method of *kwasz*. *Kwasz* was seen as an agreeable beverage and was also considered medicinal. People all over the Russian Empire used it; it spread to all Russian peasants, people in Europe, Asia and many people used it. It was served to soldiers and officers alike and even in military hospitals (Maurizio, 1927) and it is believed to have originated thousands of years ago. *Kwasz* has been made with many different grains; wheat, barley, rye, buckwheat and or mixtures of these.

### Russian, Central Asian, and archaic German home-medicines

Concerning non-fermented remedies, of Russian origin is maybe the use of radish; radish juice was in fact mentioned as an anti-cough medicine in early Russian folk medical reports (Tilesius, 1840).

Central Asian/Turkic traces derived from experiences of the last century that *Russlanddeutschen* shared with different autochthonous populations can also be identified in the use of coriander as a digestive, and a few culinary preparations (*Plow*, *Bischmarmak*, *Lagman*) as a reconstituent.

Apart from chamomile tea, which is believed to represent a marker of German identity, as field studies among *Russlanddeutschen* living in Dakota (USA) (Arends, 1989) and ethnic elderly German women who migrated after the 2nd World War to Northern England (unpublished data) demonstrated, archaic German (or more precisely, probably Swabian) traces were found in a few home-remedies: *Mehlsuppe*: wheat flour soup used to treat abdominal pains; *Schnitzsuppe*: a sweet soup based on slices of dried apples and consumed with homemade dumplings as a strengthening-ritual food, especially after funerals; and *Schupfnudel*: potato dumplings as a fortifying medicine. These probably represent the remains of the original folk pharmacopoeia of the *Russlanddeutschen*.

Another important finding was related to the shifts that a few herbal medicines have gone through while moving from Western European to Eastern European/Siberian phytomedical traditions:

- oregano, used in Germany and in Europe mainly as a digestive (Pahlow, 1993: 103–104), was quoted by our informants for its mild sedative properties. This seems to correspond to the folk use of the same plant in Belarus in the 19th century (von Henrici, 1894: 33);
- wild garlic leaves, used mainly in Germany as a minor food/seasoning source, were mentioned by our informants as a 'depurative' and as a preventative of various illnesses. Hence, wild garlic leaves were preserved via lacto-fermentation and eaten throughout the year using the traditional preparation methods found further to the East. This roughly corresponds to the use of the same plant in Siberia as an anti-scorbutic (Demitsch, 1889: 164).

These shifts are similar to what is defined in medical anthropology as the 'indigenization' of Western medicines (Etkin *et al.*, 1990; Cocks and Moller, 2002). In other words, the original remedies would have been 'diverted' from their original use, de-contextualized and embedded in the cognitive schemes of the new Russian/Siberian environments.

### The importance of food–medicine intersections

It is evident from Table 1 that nearly half of all the quoted preparations are actually *food-medicines*; i.e. items that are prepared at home and consumed either to prevent or treat illnesses, or simply because they are considered 'healthy foods' (folk functional foods, as defined in Pieroni and Quave, 2006).

Many ethnoscientific studies carried out during the past decades have already pointed to the inextricable link and convergence between food and medical practices in various cultures (Etkin and Ross, 1982; Johns, 1990; Pieroni, 2000; Pieroni *et al.*, 2002, 2007a; Pieroni and Price, 2006, and chapters therein), however this is an area that is still largely neglected in modern, evidence-based clinical phytotherapy.

It is interesting to note that the relative cultural isolation in which *Russlanddeutschen* lived for so many decades and the problems that they had in gaining social acceptance within the former Soviet Union could be one of the reasons why these migrants adopted 'mimetic strategies' for providing healthcare in their households, and why they used very simple herbal food-medicines that could be easily prepared at home, instead of looking for 'more sophisticated' herbal medicines that might be available in the markets or in other public arenas.

At the same time, the very different environmental conditions that these ethnic Germans found, first in the Ukrainian/Volga/Ural regions, and more particularly later in Siberia, could have led to their adoption of a very restricted and simple folk pharmacopoeia based on what was readily and easily available. Similar patterns have been observed among descendants of ethnic Albanians who migrated to Southern

Italy in the 15th century. Unlike their South-Italian autochthonous neighbours, the Albanians' herbal medicines also comprise a restricted number of quite simple homemade remedies (Pieroni and Quave, 2005).

### Quoting or using herbal medicines? Cultural representations towards strangers

One of the specific peculiarities of this fieldwork was the dynamic nature of the representations that the interviewed women gave of 'their' herbal medicines. A few of them were very keen to show the interviewer what they perceived to be their 'Russian' heritage regarding their plant knowledge because they presumed that the interviewer was non-German. Others, especially the more elderly interviewees, tended to underline their old German remedies much more, often assuming that the same interviewer was of German origin. The first author had never experienced in all previous 15 years of ethnobotanical studies how field data can be influenced quite remarkably by very 'fluid' processes of representation (Marcus, 1998).

This may well have been the main limitation of this study because the informants tended to talk about those herbal remedies, which for various reasons they perceived were able to best represent their identities. This, in turn, was probably influenced by the negotiations surrounding cultural identity that were ongoing between the field researcher and his informants.

On the other hand, it is well known in every ethnobotanical and ethnomedical study that the free-listing of plant uses may be related to the interviewees' perception of cultural importance, and this does not always correspond completely to the plants' actual use or frequency of use.

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## CONCLUSION

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### The use of herbal medicines among newcomers from Eastern Europe: challenges for public health policies

Herbal medicines are a commonly used source of self-treatment in many cultures and, depending on the historical developments of their use, and especially on the occurrence of relevant written traditions, these remedies have in many cases been integrated into respective national health systems (e.g. Ayurveda, Traditional Chinese Medicine, Traditional Tibetan Medicine, Unani). However, despite the fact that during the past decades significant waves of migrations have moved to Western Europe and brought their herbal medicines with them, most Western European national health services have been relatively slow in considering 'less known/standardized' TM systems for use among migrant communities, both in terms of phyto-pharmacovigilance, and understanding *emic* health-seeking behaviour.

Our findings show that public health policies aimed at improving migrants' health and well-being need to start from in-depth analyses of how healthcare is provided within migrants' households, and the role played in migrant communities by non-Western herbal remedies.

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