

A Preliminary Report on Diversity of Products in Organic Farmers' Markets in Surin, Northeast Thailand

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Synopsis

This paper analyzes itemized lists of commodities found in organic farmers' markets ("Green Markets") in Surin Province, Northeast Thailand. There is a wide variety of organic products ranging from garden-fresh vegetables, herbs, and fruits, to processed foods including traditional sweets and other local specialties. The products also include a variety of non-domesticated plants and animals. The marketing style of each vendor is characterized as a small-lot selling of a variety of products, which are available in his or her farmland and its environs. The diversity of organic products not only reflects a rich indigenous food culture but also shows a great social potential for sustainable food production in the area.

Keywords: organic farm products, farmers market, agricultural biodiversity, Northeast Thailand

1. Introduction

In Thailand, there is an increasing demand for safe farm products without harmful chemicals, as concern about food safety has grown among consumers and producers alike during the past two decades. Consumers are also concerned about where their food comes from, and how the food is handed along the way until it ends up on their table. A long and complicated journey of foods not only makes consumers ill at ease regarding food safety, but also leads to additional environmental costs. Local farmers' markets are a two-birds-one-stone solution to such problems, in that not only can it make food distribution

routes from farm to table visible and traceable, but also supports sustainable production of organic farmers, besides producing a smaller carbon footprint.

Surin Province of Northeast Thailand (Figure 1) has recently witnessed the rising boom of organic farmers' markets locally known as a "Green Market (*talaat sii khiaw*)". Green Markets in Surin were originally initiated in the early 2000s by members of a local cooperative, which had been exporting organic jasmine rice mainly to Europe on a basis of a "fair trade" principle. Apart from export business, cooperative members were eager to establish alternative market channels locally for other

kinds of organic products. In particular, a regular Saturday Green Market in Surin City, the provincial capital, has achieved a marked success.

In stark contrast to the monoculture of jasmine rice for export, the local Green Markets are marked by the great diversity among available organic products. It also shows a great potential for sustainable production of locally needed products, as well as for preservation of local food culture. The purpose of this report is to demonstrate the diversity of commodities in Green Markets in Surin, based on preliminary field surveys conducted between 2012 and 2015.

2. A Brief History of Green Markets in Surin

The origin of the Green Markets in Surin dates back to the early 1990s, when local farmers and NGOs embarked on fair trade of organic rice. This eventually led to the establishment of the Rice Fund Surin Organic Agriculture Cooperative, which was officially registered in 2003. Besides building up an export business for organic jasmine rice, the cooperative also sought local outlets for rice and other organic commodities produced by the members. There are four categories of alternative organic markets which the cooperative and its sister organization (NGO) have tried to create: a grocery shop, regular green markets, mobile markets, and village community markets (Nuntiya and Thunya 2011: 64). A grocery shop or “Jasmine Rice Shop (*raan khaaw hoom*)”, currently located at the heart of Surin City, has been in operation

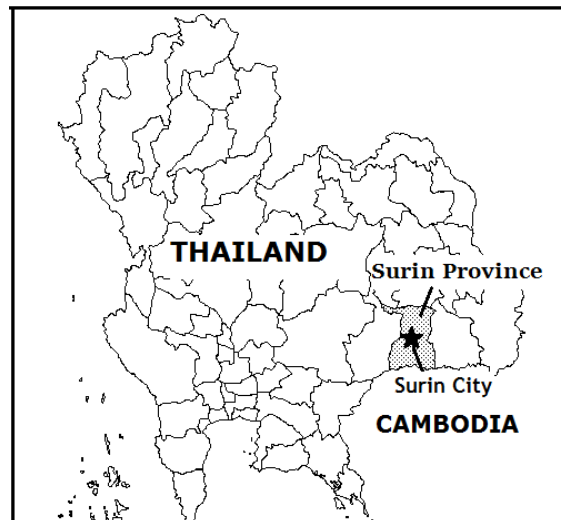


Figure 1: Study Area

since 1994, initially as an outlet for organic jasmine rice produced by members of the cooperative. It now sells not only organic rice but also various other products including fresh foods produced by the cooperative members who bring garden-fresh vegetables and fruits to the shop every Thursday.

Saturday Green Market in Surin City is the most successful case to create an alternative marketplace linking rural producers directly to urban consumers. It was launched in 2003 to promote the sales of organic products as well as to generate regular income for farmers, with logistic supports from the provincial government led by Mr. Kaseemsak, the governor at that time, who officially announced the policy to support organic agriculture. The number of producers supplying organic products to the market increased from the initial 17 to 86 households in the early 2000s (Triiyadaa 2012: 23). A majority of them were also organic rice growers associated with the Rice Fund Surin Cooperative.

Regular Green Markets have also spread into



Photos 1 and 2: Farmers and Their Products

other areas in Surin Province. In Prasaat town, about 25km south of Surin City, a Tuesday Green Market was launched in 2006 in response to an increasing demand for outlets for local organic products. Between 2012 and 2014, two Green Markets were regularly organized in Prasaat town; Tuesday in front of the district office and Wednesday in front of Prasaat District Hospital. Recently, another Green Market was opened further south, in Kaapchoeng District located at the Cambodian border.

The Rice Fund Surin Cooperative and its affiliated NGO encourage its members to take part in these Green Markets in order to diversify their income sources, rather than depending solely on the sales of paddy. Registered producers bring anything available at their home, both fresh and processed products, and sell them face-to-face with consumers. The members have to prepare all the products without applying any kind of chemical inputs. While selling, they put on green aprons and caps as uniforms to prove their membership (Photos 1 and 2). It is also important to note that the majority of villagers

in Surin Province are ethnically Khmer, reflecting its proximity to the Cambodian border (Figure 1). At the same time, Surin also has a significant number of ethnic Lao population, making the province a unique intersection of Lao and Khmer food cultures.

3. An Analysis of Diverse Products in the Green Market

(1) Overview

The following sections will examine a wide range of diverse commodities found in the market, based mainly on the data obtained from our field survey conducted in late November, 2014, at the Saturday Green Market in Surin City. Forty two farmers (80% of them were female) who came to sell their products were interviewed on their commodities. The commodities' names, prices, production costs, along with some explanation on the usage and medicinal benefits of the products were given. As can be seen from the above Photos 1 and 2, their marketing style is characterized as a small-lot selling of a wide variety of products. In other words, they bring whatever is available in their farmland and its environs, however

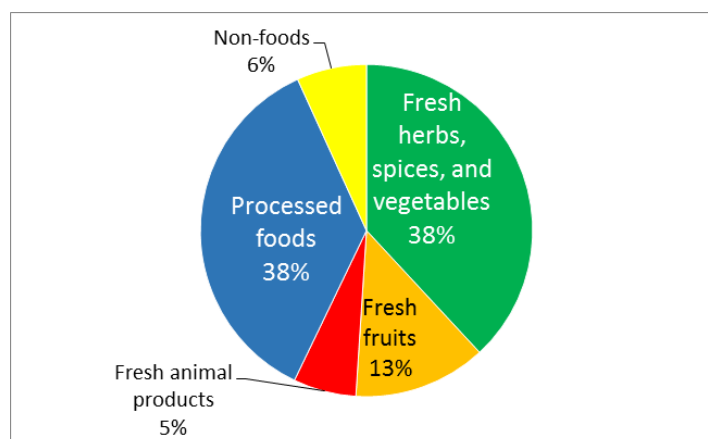


Figure 2: Breakdown of Recorded Products

small the amount is. It is also common that a vendor may sell products from several different members in his or her neighborhood, bringing and selling them on their behalf to save the expense for transportation.

We recorded 146 items in total from two Saturdays in late November. One hundred and thirty seven items or 94% of all the products listed were food, among which 82 items (60%) were fresh foods and 55 (40%) were processed foods (Figure 2). Fresh foods are divided into three categories; the largest group is fresh herbs and vegetables (55 items), followed by fresh fruits (19) and fresh animal products (8). All the items recorded are presented in Tables 1 to 5 according to each category, which will be briefly examined one by one below.

(2) Fresh Herbs, Spices, and Vegetables

As shown in Table 1, among 55 items recorded, 25 or 45% fall into the subcategory of leafy herbs and vegetables. Notably, nine products from No. 1 to No. 9 are unique commodities that can rarely be found in other ordinary markets. Some of them are

uncultivated and may be collected from wild (or semi-wild) environments including paddy fields. Many herbs in this subcategory are not only indispensable ingredients for the local diet, but are also considered to possess medicinal properties. For example, vine spinach (No. 12) is considered to be effective for a headache. This fact indicates a rich indigenous culture of using medicinal plants including wild herbs. Leafy vegetables also include other common herbs and vegetables popular across Thailand (Nos. 15-25).

The second subcategory, roots and tubers, includes 12 items, among which at least six items are rarely found in other marketplaces. Nos. 28 to 30 (and possibly Nos. 26 and 27) may be indigenous varieties of root crops and are difficult to find in other marketplaces. Nos. 32 to 37 are spices used not only for cooking but also for medicinal purposes as well. Fingerroot (No. 33) and some varieties of turmeric (No. 34) are such typical herbs with healing qualities. White turmeric (*khamin khaaw*) is supposed to be effective for various digestive disorders, while red turmeric (*khamin*

daeng) is applied to whiten and beautify one's skin. The rest (subcategory of "others") is made up mainly of common vegetables and herbs such as citrus and beans, but also includes unique products (Nos. 51 to 55), including an exotic plant like *sacha inchi* (No. 53).

Some plant species in this category (Nos. 3 and 5), along with those which appear in Table 6 (Nos. 159 and 175), were also referred to in Moreno-Black et al. (1996) as "non-domesticated plants" that are collected from the wild or transplanted in home gardens in Northeastern Thailand. According to them, non-domesticated plants were not only important as food or medicine for domestic use, but also provided a valuable source of income for villagers, especially women.

(3) Fresh Fruits

In the Green Market, one can find a variety of seasonal fresh fruits, both common and uncommon ones. Among 19 items recorded, six are banana varieties, of which *nam waa* banana (No. 56) is the most popular variety found across the market. In the category of processed food (Table 4), there is another variety of banana (*kluai hak muk*, No.131) which may not be eaten raw and is usually roasted. Banana chips can also be found (No. 130) in Table 4. The other fruits include both popular fruits across Thailand and uncommon fruits which are difficult to be found in other ordinary markets. Note that even popular fruits (such as guava and papaya) include traditional varieties, which are different from other improved varieties in ordinary markets in their taste and

appearances (Nos. 63 and 64). Gac was probably introduced into Surin only recently, and this exotic fruit has become one of the eye-catchers of the Green Market. Gac is supposed to be effective for cancer, and not only fresh fruits but its young leaves, fresh juice, and seedlings are also on sale (Nos. 9, 65, 119, 179). On the other hand, Nos. 70-74 are considered to be age-old naturalized plants, but they may rarely be found in other marketplaces as commodities.

(4) Animal Products

Animal products include livestock and poultry products (eggs), along with wild (or cultivated) aquatic animals (Table 3). Pork is only provided by members of a particular local group promoting organic pig production. Aquatic animals include a variety of fishes, along with shrimps, frogs, and crabs (see also Tables 4 and 6). While catfishes and snakeheads are mainly caught in paddy fields, Nile tilapias are normally raised in artificial ponds. These fresh animal products can also be processed into a variety of products such as roasted chicken and fried fish (Table 4, Nos. 96-103). No. 103 is considered to be a local specialty of Surin. It is interesting to note that the processed foods list includes two kinds of insects. Crickets (No. 104) can be caught in the wild or cultivated, and fried cricket is a popular snack across Northeast Thailand. Boiled silkworm pupae (No. 105) are a by-product of sericulture, which is still a popular means of livelihood in rural Surin.

(5) Processed Foods

Processed food list is made up of a wide variety of items (Table 4). The biggest group in this category is sweets. Especially, a number of traditional Khmer sweets (Nos. 83-87), which have normally been produced for domestic consumption, are one of the unique local products characterizing Green Markets in Surin. Banana curry (No. 126) is also a Khmer specialty normally only served on the occasion of funerals. Besides, unique seasonings which characterize northeastern Thai cuisine such as chili paste and pickled fish (Nos. 106-112) can also be found. Fresh juices (Nos. 119-123 and Nos. 186-190 in Table 6) are also popular items here, some for refreshing and others for medicinal purposes.

(6) Non-food Items

Nine non-food items also display the uniqueness of this market (Table 5). Traditional torches (No. 140) and massage balls (No. 146) are difficult to find in other marketplaces. Organic fertilizer (No. 145), natural detergent (Nos. 138-139) and wood vinegar (No. 144) reflect members' background as organic farmers.

(7) Organic Foods Observed in Other Occasions

As some items are seasonal products, the above data does not cover all the items sold in the market. In Table 6, we attempt to show the lineup of other kinds of commodities appearing on different occasions, based on Triiyadaa (2012) and our own field surveys. There are a

number of fresh products (especially herbs) and processed foods which do not appear in Tables 1 to 4. It is notable that a number of indigenous varieties of rice (Nos. 161-166) can be found in this market. Most of these local varieties were on the verge of extinction, and some members in the Green Market network have been making efforts to reproduce their seeds and trying to sell these varieties in Green Markets and other occasions.

4. Concluding Remarks

To highlight the diversity of local organic farm products, this paper has presented and analyzed itemized lists of commodities found in Green Markets in Surin Province. There is a startling variety of available organic products including garden-fresh vegetables and fruits, wild herbs and berries, jasmine and traditional rice, organic pork and chickens, wild and farmed fishes, processed foods including traditional Khmer sweets and other local specialties. Such a great variety may reflect an age-old rich food culture of indigenous Khmer people.

At the same time, the products also include many kinds of wild (or non-domesticated) plants and animals, which are easily collected or caught even by landless farmers or elder persons. Green Markets, thus, offer regular income opportunities not only to ordinary farmers, but also for disadvantaged villagers, who may not be able to produce organic jasmine rice for export for some reason (Triiyadaa 2012: 43, 64; Nuntiya and Thunya 2011: 63-4).

One of the noticeable features of the marketing style of each vendor is the sale of multiple goods in small lots. This fact may indicate that various organic commodities are produced as an extension of subsistence production for their own consumption. Commodification of subsistence materials can contribute to both the generation of additional income and continuation (rather than abandonment) of local food-producing activities from multiple sources. Thus the diversity and uniqueness of organic products not only contributed to the success of Green Markets in Surin, but also shows a great social potential for sustainable food (and medicine) production in local area.

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Table 1. Fresh Herbs, Spices, and Vegetables

Subcategory	No.	Thai Name	Common name	Binominal name
Leafy herbs and vegetables	1*#	อีอ้อม	rice paddy herb	<i>Limnophila aromatica</i>
	2*#	ผักนมข้าว	-	unspecified
	3*#§	ผักลั่นปี่	lilac tasselflower	<i>Emilia sonchifolia</i>
	4*#	ผักสังกะสี		unspecified
	5*§	ใบย่านาง	-	<i>Tiliacora triandra</i>
	6*§	ผักเข็มปลา	-	unspecified
	7*	ผักกระโดนน้ำ	fresh water mangrove	<i>Barringtonia acutangla</i>
	8*§	หม่อนพื้นบ้าน	mulberry leaves (indigenous)	<i>Morus</i> sp.
	9*§	ยอดผักขาว	young leaves of gac	<i>Momordica cochinchinensis</i>
	10§	ผักโขม	purple amaranth	<i>Amaranthus blitum</i>
	11§	อ่อมแซบ	Chinese violet	<i>Justicia gangetica</i>
	12#§	ผักปลัง	vine spinach	<i>Basella alba</i>
	13§	ตำลึงทอง	wild maracuja	<i>Passiflora foetida</i>
	14	ใบเตย	pandanus leaf	<i>Pandanus amaryllifolius</i>
	15§	ผักบุ้ง	water spinach	<i>Ipomoea aquatica</i>
	16§	ยี่หระ (ผักชีฝรั่ง)	long coriander	<i>Eryngium foetidum</i>
	17	ใบชะพลู	-	<i>Piper sarmentosum</i>
	18§	กระเพรา	holy basil	<i>Ocimum tenuiflorum</i>
	19§	ยอดมะระ	young leaves of bitter melon	<i>Momordica charantia</i>
	20§	ตะไคร้	lemon grass	<i>Cymbopogon citratus</i>
	21	กุยช่าย	Chinese chives	<i>Allium tuberosum</i>
	22	ผักกาดเขียวปลี	mustard greens	<i>Brassica juncea</i>
	23	ผักกาดขาว	Napa cabbage	<i>Brassica rapa</i> var. <i>pekinensis</i>
	24	ผักกาดฮ่องเต้	unspecified	<i>Brassica rapa</i>
	25	ผักกวางตุ้ง	unspecified	<i>Brassica rapa</i>
Root and tuberous herbs and vegetables	26	เผือก	taro	<i>Colocasia esculenta</i>
	27	มันแดง	-	unspecified
	28*	มันกระบอก	unspecified	<i>Amorphophallus</i> sp.
	29*	มันฝ้าย	-	unspecified
	30*	มันสะกรุปลัง	-	unspecified
	31*	มันสาคุ	arrowroot	<i>Maranta arundinacea</i>
	32§	แก่้นตะวัน	Jerusalem artichoke	<i>Helianthus tuberosus</i>
	33§	กระชาย	fingerroot	<i>Boesenbergia rotunda</i>
	34§	ขมิ้น	turmeric	<i>Curcuma</i> spp.
	35*§	ว่านชักมดลูก	Javanese ginger	<i>Curcuma zanthorrhiza</i>
	36	ข่าเหลือง	galangal	<i>Alpinia galanga</i>
	37*§	ไพล	cassumunar ginger	<i>Zingiber cassumunar</i>
Others	38	มะเขือใหญ่	eggplant	<i>Solanum melongena</i>
	39	บวบ	luffa	<i>Luffa</i> sp.

Others	40*	ถั่วเขียวดำ	mung bean	<i>Vigna radiata</i>
	41§	ถั่วพู	winged bean	<i>Psophocarpus tetragonolobus</i>
	42§	กระถิน	young pods of white leadtree	<i>Leucaena leucocephala</i>
	43§	พริกขี้หนู	bird's eye chili	<i>Capsicum annuum</i>
	44	มะนาว	key lime	<i>Citrus aurantifolia</i>
	45	มะกรูดใหญ่	kaffir lime	<i>Citrus hystrix</i>
	46§	ห้วปลี	banana blossom	unspecified
	47*#	ดอกบัว	lotus flower	<i>Nelumbo</i> sp.
	48§	สายบัวขมพู	lotus stem	<i>Nelumbo</i> sp.
	49	อ้อยมะลิขี้	sugarcane	<i>Saccharum officinarum</i>
	50§	กระเจี๊ยบ	roselle calyces	<i>Hibiscus sabdariffa</i>
	51*#§	บอระเพ็ด	heart-leaved moonseed	<i>Tinospora cordifolia</i>
	52*§	ติปส์	long pepper (dried?)	<i>Piper longum</i>
	53	ดาวอินคา	sacha inchi (dried?)	<i>Plukenetia volubilis</i>
	54#	คุณ	giant elephant ear	<i>Colocasia gigantea</i>
	55#§	บานไม่รู้โรย	globe amaranth	<i>Gomphrena globosa</i>

Source: Field survey, 2014.

Notes: The items with an asterisk (*) are rare in ordinary markets. Those with a sharp (#) may not have been cultivated and were likely to be collected in village environs (paddy fields, waterways, ponds, and forests). Those numbers with a § mark are considered by villagers to contain specific medicinal properties. Identification of species is only provisional. The same is applied to the following tables.

Table 2. Fresh Fruits

Subcategory	No.	Thai Name	Common name	Binominal name
Bananas	56§	กล้วยน้ำว้า	Pisang Awak	<i>Musa</i> sp.
	57	กล้วยหวาน	-	<i>Musa</i> sp.
	58*	กล้วยเล็บเต่า	-	<i>Musa</i> sp.
	59*§	กล้วยดินเต่า	-	<i>Musa</i> sp.
	60	กล้วยหอมเขียว	Cavendish banana	<i>Musa</i> sp.
	61§	กล้วยหอมทอง	Gros Michel banana	<i>Musa</i> sp.
Other fruits	62§	เสาวรส	passionfruit	<i>Passiflora edulis</i>
	63*	ฝรั่งบ้าน	guava (indigenous)	<i>Psidium guajava</i>
	64*§	มะละกอพื้นบ้าน	papaya (indigenous)	<i>Carica papaya</i>
	65*§	ฟักข้าว	gac	<i>Momordica cochinchinensis</i>
	66	มะขามเปรี้ยว	tamarind	<i>Tamarindus indica</i>
	67*	ส้มโอทองดีพื้นบ้าน	pomelo (indigenous)	<i>Citrus grandis</i>
	68	ขนุน	jackfruit	<i>Artocarpus heterophyllus</i>
	69	มะพร้าว	coconut	<i>Cocos nucifera</i>
	70*#§	มะขามป้อม	Indian gooseberry	<i>Phyllanthus emblica</i>
	71*#	สมอไทย	yellow myrobalan	<i>Terminalia chebula</i>

Other fruits	72*	มะกอก	yellow mombin	<i>Spondias mombin</i>
	73*	ตะลิงปลิง	cucumber tree	<i>Averrhona bilimbi</i>
	74*§	มะขวิด	wood apple	<i>Limonia acidissima</i>

Source: Field survey, 2014.

Table 3. Fresh Animal Products

Subcategory	No.	Thai Name	Common name	Binominal name
Livestock	75	เนื้อหมู	pork	<i>Sus scrofa domesticus</i>
Poultry eggs	76	ไข่เป็ด	duck eggs	<i>Anas platyrhynchos domesticus</i>
	77	ไข่ไก่	chicken eggs	<i>Gallus gallus domesticus</i>
Fishes	78	ปลานิล	Nile tilapia	<i>Oreochromis niloticus</i>
	79*#	ปลาตุกนา	catfish	unspecified
	80#	ปลาช่อน	snakehead murrel	<i>Channa striata</i>
Others	81#	กุ้งฝอย	freshwater shrimp	unspecified
	82	กบ	Chinese edible frog	<i>Hoplobatrachus rugulosus</i>

Source: Field survey, 2014.

Table 4. Processed Foods

Subcategory	No.	Thai Name	Description
Sweets	83*	ขนมเนื้อมะพร้าว	traditional Khmer sweet made from sticky rice flour
	84*	ขนมโก๋	traditional Khmer sweet made from rice flour
	85*	ขนมกันตรึม	traditional Khmer sweet made from sticky rice flour
	86*	ขนมดอกบัว(โชค)	traditional Khmer sweet made from rice flour
	87*	ต้มต่าง	traditional Khmer sweet made from sticky rice and lye
	88	ข้าวหมาก	sweet fermented rice
	89*	ข้าวตู	Thai/Khmer sweets made from leftover rice
	90*	ขนมกราว	traditional Khmer sweet?
	91*	ขนมนางเล็ด	Thai/Khmer traditional sweet made from sticky rice flour
	92*	ขนมต้ม	Thai/Khmer traditional sweet made from sticky rice flour
	93*	ขนมดอกจอก	Thai/Khmer traditional sweet made from rice flour
	94	บัวลอย	Thai traditional sweet made from sticky rice flour
	95	ข้าวต้มมัด	Thai traditional dessert made from sticky rice and bananas
Processed animals	96	ปลาช่อนเผา	roasted snakehead
	97	ปลาช่อนทอด	fried snakehead
	98	ปลาดุกทอด	fried catfish
	99	ปลานิลทอด	fried tilapia
	100	ไก่บ้านปิ้ง	roasted chicken (indigenous)
	101*#	ปูนาปิ้ง	roasted rice field crab
	102*#	ปูนาดอง	pickled ricefield crab

Processed animals	103*	กบยัดไส้	frog stuffed with spices
	104	จิ้งหรีด	fried cricket
	105	ดักแด้	boiled silkworm pupae
Processed seasoning	106	น้ำพริกปลาร้าบองสุก	chili paste with pickled fish
	107	น้ำพริกมะเขือ	chili paste with eggplant
	108	น้ำพริกหนุมแมงดา	chili paste with giant water bugs
	109	ข้าวคั่วพริกป่น	chili powder and roasted rice for <i>laap</i> dish
	110	แจ่ว	chili paste
	111	ปลาจ่อม	pickled fish
	112	ปลาจ่อมกุ้ง	pickled shrimp
Processed rice	113*	กระเทียมเจียว	fried garlic
	114	ข้าวไรซ์เบอร์รี่	riceberry rice
	115	ข้าวกล้องแดง	brown rice (red jasmine)
	116	ข้าวมะลิ	jasmine rice
	117	ข้าวมะลิขัดมือ	hand polished jasmine rice
Fresh juice	118	ข้าวสามสี	three-color rice
	119*§	น้ำพิกข้าว	gac juice
	120	น้ำมะพร้าว น้ำหอม	coconut juice
	121	น้ำย่านาง	juice made from <i>Tiliacora triandra</i> leaves
	122	น้ำผลไม้	fruits juice (unspecified)
Curry, soup, and rice noodles	123	น้ำสมุนไพร	herb juice (unspecified)
	124	แกงซี่เหล็ก	curry made from senna siamea leaves
	125*	แกงปลาแดง	curry made from fishes and red ants
	126*	แกงกล้วย	special Khmer curry made from banana
	127	ขนมจีนน้ำยา	rice flour noodles and chili sauce
	128	น้ำยาปลาทุ	chili sauce made from fish for rice flour noodles
Others	129	น้ำยาปลา	chili sauce made from fish for rice flour noodles
	130	กล้วยฉาบ	banana chips
	131	กล้วยหักมุก	roasted banana (<i>Musa</i> "silver bluggoe")
	132	มะขามแช่อิ่ม	tamarind preserved in syrup
	133§	กระเจียบแห้ง	dried roselle calyces
	134*§	ผักกุ่มดอง	pickled leaves of sacred garlic pea (<i>Crateva religiosa</i>)
	135	ถั่วคั่ว	roasted peanuts
	136	มันสาคุ	boiled arrowroots
	137	ห่อหมกห้วปลี	steamed banana blossom with spices in banana leaves

Source: Field survey, 2014.

Table 5. Non-Food Items

Subcategory	No.	Thai Name	Description
	138	น้ำยาถูพื้นน้ำหมัก	natural detergent to polish floor

139	น้ำยาล้างจานน้ำหมัก	dishwashing natural detergent
140*	ไต้ไฟ	traditional torch
141	ใยบัว	luffa sponge
142	ต้นเสาวรสม่วง	seedling of passionfruit
143*	ต้นมะขวิด	seedling of wood apple
144	น้ำส้มควันไม้	wood vinegar
145	ปุ๋ยอินทรีย์	organic fertilizer
146*§	ลูกประคบสมุนไพร	a bag of medicinal herbs for massage

Source: Field survey, 2014.

Table 6. Other Items Found in Different Occasions

Source	No.	Thai Name	Common Name	Binominal Name
Triiyadaa (2012)	147	ผักชีลาว	dill	<i>Anethum graveolens</i>
	148	ดอกแค	agasta flower	<i>Sesbania grandiflora</i>
	149§	ผักพวย	yellow burr head	<i>Limnocharis flava</i>
	150	ผักแว่น	-	<i>Marsilea crenata</i>
	151	สะเดา	neem	<i>Azadirachta indica</i>
	152§	ผักกะออม	rice paddy herb	<i>Limnophila aromatica</i>
	153§	บัวบก	gotu kola	<i>Centella asiatica</i>
	154	ผักกระเจต	water mimosa	<i>Neptunia oleracea</i>
	155§	ผักกะสัง	pepper elder	<i>Peperomia pellucida</i>
	156	อัญชัน	butterfly pea	<i>Clitoria ternatea</i>
	157	ขิง	ginger	<i>Zingiber officinale</i>
	158	หมากเค็ง	velvet tamarind	<i>Dialium</i> sp.
	159	หน่อไม้	bamboo shoots	
	160	ข้าวหอมนิล	black jasmine rice	
	161	ข้าวเหลืองอ่อน	a indigenous variety of rice in Surin	
	162	ข้าวปะกาอัมปิล	a indigenous variety of rice in Surin	
	163	ข้าวเนียงกง	a indigenous variety of rice in Surin	
	164	ข้าวบองกษัตริย์	a indigenous variety of rice in Surin	
	165	ข้าวนางร่อยใหญ่	a indigenous variety of rice	
	166	ข้าวโสมาสี	a indigenous variety of rice	
	167	ข้าวเหนียวดำ	black sticky rice	
	168	ข้าวปะการันดวล	a variety of Cambodian jasmine rice?	
	169	ปลาหมอ	fresh water fish	<i>Anabas testudineus</i>
	170	ปลาขาว	fresh water fish	unspecified
	171	ปลากระดี่มุนา	fresh water fish	unspecified
	172	เขียด	small frog	unspecified
	173	หอยจ๊ับ	river snail	unspecified
	174	ไข่มดแดง	weaver ant's eggs and pupae	<i>Oecophylla smaragdina</i>

Field survey, November 2013, at Surin Green Market	175	มันมือเสือ	-	<i>Dioscorea esculenta</i>
	176	มะสัง	-	<i>Feroniella lucida</i>
	177	ใบขี้เหล็ก	sena siamea leaves	
	178	ถั่วงอก	bean sprout	unspecified
	179	ต้นผักข่า	gac seedling	
	180	ไข่เค็ม	salted egg	
	181	น้ำเต้าหู้	soy milk	
	182#	ปลาหลด	fresh peacock eel	<i>Macrogathus</i> sp.
Field survey, November 2014, at Surin Green Market	183	จมูกข้าว	rice germ	
	184	ลูกยอ	great morinda	<i>Morinda citrifolia</i>
	185	กลั้วบัวบก	gotu kola seedling	
	186	น้ำกระเจี๊ยบ	roselle juice	
	187	น้ำตะไคร้	lemon grass juice	
	188	น้ำอัญชัน	butterfly pea juice	
	189	น้ำมะขาม	tamarind juice	
	190	น้ำมะตูม	bael juice	<i>Aegle marmelos</i>
Field survey, June 2015, at Jasmine Rice Shop in Surin	191	เมล็ดบัว	lotus seeds	<i>Nelumbo</i> sp.
	192	สับปะรด	pineapple	<i>Ananas comosus</i>
	193	ฟักทอง	-	<i>Cucurbita</i> sp.
	194	แตงโมอ่อน	watermelon	<i>Citrullus</i> sp.
	195	ชาใบหม่อน	mulberry tea	
	196	โหระพา	Thai basil	<i>Ocimum basilicum</i>
	197	ดอกสลิด	Tonkin jasmine flower	<i>Telosma cordata</i>
March 2012, at Prasaat Green Market	198	กระบก	roasted wild almond	<i>Irvingia malayana</i>
Nov. 2014, at Prasaat Green Market	199	ข้าวหลาม	sweet sticky rice cooked in bamboo tube	
	200	ถั่วดำ	black gram (?)	<i>vigna</i> sp.

有機農産物直売市場における商品の多様性 —東北タイ、スリン県における「緑の市場」の事例—

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要約

本報告では、タイ東北部で近年盛んになっている有機農産物直売市場（「緑の市場」）における商品の多様性について分析を行った。2014 年の 11 月にスリン市の緑の市場で行った現地調査により作成した商品リストに基づき、その同定と分類を行った結果、次のことが判明した。(1) 全 146 商品の 90%以上は食物であり、薬用効果があると認識されているものが多く含まれている。(2) 一般市場には流通していない、ユニークな商品（野生の葉菜、薬草や魚類、クメール民族の郷土料理や伝統的なお菓子など）が少なからず販売されている。(3) そうしたユニークな商品は、土着のクメール系タイ人の伝統的な自然や栽培作物に対する知識、そうした知識に基づく食文化などと深い関係があると考えられる。このような商品の多様性とユニークな性質は、単にスリン県内の緑の市場の成功の一因となっているのみならず、食と農を通した自然資源の地域内循環を構築するための大きな社会的潜在力を示している。