

Collaborative Field Exploration and Collection of Plant Genetic Resources in Laos, December 2022

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Summary

A collaborative survey of plant genetic resources was carried out in Oudom Xai provinces of the Lao People's Democratic Republic. Sorghum, maize, and beans were the main targets of the survey from December 26 to 31, 2022 (6 days). A total of 128 accessions of 20 species were collected, including 14 *Sorghum bicolor*, 1 *Setaria italica*, 3 *Eleusine coracana*, 15 *Zea mays*, 24 *Vigna unguiculata*, 5 *Cucumis sativus*, and 14 *Cucurbita moschata* accessions, etc.

KEY WORDS: *Sorghum bicolor*, *Zea mays*, *Vigna unguiculata*, *Cucumis sativus*

Introduction

Laos is a country where relatively high diversity is maintained in various crops (Yamamoto *et al.* 2015a). Therefore, collecting diverse plant genetic resources in Laos is significant for the development of useful cultivars in many crops.

In 2006, The National Institute of Agrobiological Sciences (NIAS, currently integrated with the National Agriculture and Food Research Organization [NARO]) of Japan and the National Agriculture and Forestry Research Institute (NAFRI) of Laos signed a Memorandum of Agreement (MOA) and Memorandum of Understanding (MOU) to conduct collaborative surveys and collection expeditions for plant genetic resources in Laos. Subsequently, in 2014, the NIAS and the NAFRI established a Joint Research Agreement (JRA) under the Plant Genetic Resources in Asia (PGRAsia) project funded by the Ministry of Agriculture, Forestry and Fisheries of Japan, to promote the collection and effective use of plant genetic resources

in Laos (Okuizumi *et al.* 2016).

Since 2006, 18 surveys of plant genetic resources have been conducted in 14 provinces in Laos: Xieng Khouang, Houa Phan, Bolikhamsay, Khammouane, Oudom Xai, Luang Namtha, Bokeo, Phongsaly, Luang Prabang, Sainyabouri, Phonsavan, Attapeu, Champasak, and Savannakhet, as well as the capital, Vientian (Sakata *et al.* 2008; Saito A *et al.* 2009; Saito T *et al.* 2015, 2016; Matsunaga *et al.* 2010; Kawase *et al.* 2012; Okuizumi *et al.* 2011, 2013, 2015a, 2015b, 2016, 2019, 2021; Vilayheuang *et al.* 2015; Yamamoto *et al.* 2015a, 2015b; Miyatake *et al.* 2019, 2020).

In these explorations, many kinds of plant genetic resources, including cereal crops such as sorghum, foxtail millet and maize, vegetables such as eggplant, chili and cucumber, beans such as cowpea and mungbean, were collected.

In this survey, we visited Oudom Xai Province again, where the number of collected genetic resource is limited, and focused on collecting sorghum, other

millets, beans, vegetables. The survey involved both Japanese and Laotian researchers.

Methods

The survey was conducted for 6 days, from December 26 to 31, 2022 (Table 1). We visited four districts of Oudom Xai province during the field trip (Fig. 1).

We used a rental car for transportation across the survey sites. The survey team included a researcher from the NARO, three researchers from the NAFRI, and a Laotian driver. The samples were collected from villagers. Most of them were landraces. We recorded the local names and several traits, such as plant height and cultivation conditions, of the collected seed samples through interviews. We also obtained sample photos and locality information using a global positioning system (Foretrex 301; Garmin). The names of the localities in the present report follow the available map (World Mapping Project 2017) and idiomatic spelling used by Laotians.

Results and Discussions

We visited four districts (Pak Beng, Houn, Beng, and Xay) of Oudom Xai province in northern Laos and collected 128 accessions (Tables 2 and 3) of plant genetic resources as follows:

Day 1: December 26, 2022

Site: Vientiane (capital) to Pak Beng City, Oudom Xai Province

Weather: Sunny

We moved from the Rice and Cash Crop Research Center (RCCRC) to a hotel in Pak Beng. We used train from Vientiane station to Muang Xai station, and rental car from Oudom Xai to Pak Beng.

Day 2: December 27, 2022

Site: Pak Beng District, Oudom Xai Province

Weather: Sunny

Collection number: 1-35

First, we visited the Khamue tribe in Keng Xang Village, where villagers provided 16 accessions (Collection numbers 2022-12-L1 to 2022-12-L16 in Table 3; hereafter, L1-L16; Photos 1-16). There were 1 bottle gourd, 2 chili, 2 cowpea, 1 cucumber, 1 eggplant, 1 job's tears, 2 luffa, 2 pumpkin, 1 sorghum, 1 wax gourd, and 2 waxy corn.

Next, we visited the Khamue tribe in Hoy ka Village, where villagers provided 10 accessions (Collection numbers L17-L26; Photos 17-26). There

were 2 cowpea, 1 cucumber, 1 job's tears, 1 luffa, 1 oriental pickling melon, 1 pumpkin, 1 sorghum, 1 waxy corn and 1 yam bean.

Next, we visited the Khamue, Lao, Lavi tribes in Pak Ngeuy Village, where villagers provided 9 accessions (Collection numbers L27-L35; Photos 27-35). There were 2 bottle gourd, 2 cowpea, 2 luffa, 1 oriental pickling melon, 1 pumpkin, and 1 sorghum.

Day 3: December 28, 2022

Site: Houn District, Oudom Xai Province

Weather: Sunny

Collection number: 36-54

We visited the Khamue tribe in Som Xay Village, where villagers provided 12 accessions (Collection numbers L36-L47; Photos 36-47). There were 1 bottle gourd, 1 chili, 3 cowpea, 1 finger millet, 2 luffa, 2 sorghum, 2 waxy corn.

Next, we visited the Ta Liang tribe in Vang tung Village, where villagers provided 7 accessions (Collection numbers L48-L54; Photos 48-54). There were 2 cowpea, 1 finger millet, 1 job's tears, 1 sorghum, and 2 waxy corn.

Day 4: December 29, 2022

Site: Houn and Beng District, Oudom Xai Province

Weather: Sunny

Collection number: 55-83

We visited the Khamue tribe in Mainue Village, where villagers provided 9 accessions (Collection numbers L55-L63; Photos 55-63). There were 2 bottle gourd, 2 cowpea, 1 oriental pickling melon, 1 pumpkin, 2 sorghum, and 1 waxy corn.

Next, we moved to Beng District and visited the Lue tribe in Nalay Village, where villagers provided 13 accessions (Collection numbers L64-L76; Photos 64-76). There were 1 bottle gourd, 2 cowpea, 1 groundnut, 1 job's tears, 2 luffa, 1 oriental pickling melon, 2 pumpkin, 1 sesame, 1 sorghum, and 1 waxy corn.

Next, we visited the Khamue tribe in Numdor Village, where villagers provided 7 accessions (Collection numbers L77-L83; Photos 77-83). There were 2 cowpea, 1 pumpkin, 2 sesame, 1 sorghum, and 1 waxy corn.

Day 5: December 30, 2022

Site: Beng and Xai District, Oudom Xai Province

Weather: Sunny

Collection number: 84-128

We visited the Khamue tribe in Na ngam Village, where villagers provided 7 accessions (Collection

Table 1. Itinerary of the survey in Oudom Xai Province, Laos

Day	Date	Day of Week	Itinerary, Village and District	Collection #
1	12/26	Mon	Vientiane capital - Oudom Xai city - Pak Beng city, Pak Beng D	
2	12/27	Tue	Keng Xang V, Hoy ka V and Pak Ngeuy V, Pak Beng D	1-35
3	12/28	Wed	Som Xay V and Vang tung V, Houn D	36-54
4	12/29	Thu	Mainue V, Houn D, and Nalay V and Numdor V, Beng D	55-83
5	12/30	Fri	Na ngam V, Beng D, and Namon V and Phonhom V, Xai D (samples included Mokthoyai V and Mokko V, Pak Beng D)	84-128
6	12/31	Sat	Oudom Xai city, - Vientiane capital	

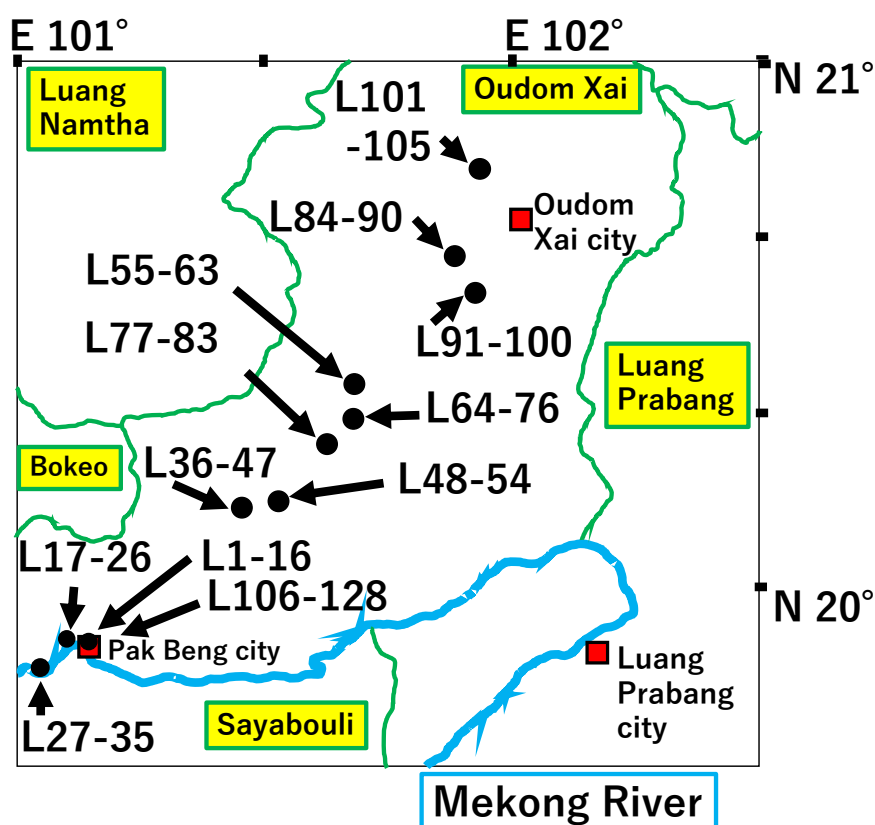


Fig. 1. Map of the collection sites. Black dots indicate the collection sites of L1 - 105 accessions. A square with an arrow indicates Pak Beng downtown, where L106-128 were provided by a staff member of the Pak Beng Agriculture and Forestry Office; thus no black dots are shown for these accessions.

numbers L84-L90; Photos 84-90). There were 1 bottle gourd, 2 cowpea, 1 luffa, 1 pumpkin, 1 sorghum, and 1 waxy corn.

Next, we moved to Xay District and visited the Khamue and Mong tribe in Namon Village, where villagers provided 10 accessions (Collection numbers L91-L100; Photos 91-100). There were 2 bottle gourd, 1 luffa, 1 oriental pickling melon, 2 pumpkin, 1 sesame, 1 upland cucumber, 1 upland rice, and 1 waxy corn.

Next, we visited the Khamue tribe in Phonhom Village, where villagers provided 5 accessions (Collection numbers L101-L105; Photos 101-105). There were 1 chili, 1 luffa, 1 pumpkin, 1 sorghum, and 1 waxy corn.

Then, we moved to Oudom Xai city and met the

researcher (Pak Beng Agriculture and Forestry Office) who assisted us in the survey of December 27. He drove a motorbike on a narrow mountain road that we couldn't drive with a rental car and visited 2 villages deep in the mountains on December 28-29. He collected 23 accessions and obtained no data of location, tribe or other details, however, collected seeds include rare accessions such as foxtail millet and finger millet. Latitude and Longitude in Table 3, which are the collection sites of these accessions, were tentatively set to the center of Pak Beng city.

First, he visited Mokthoyai Village, where villagers provided 12 accessions (Collection numbers L106-L116 and L126; Photos 106-116 and 126).

The accessions, L108 and L126 were collected

Table 2. Number of collected genetic resources

Species name	English common name	No. of accessions
<i>Arachis hypogaea</i>	groundnut	1
<i>Benincasa hispida</i>	wax gourd	1
<i>Capsicum annuum</i>	chili	5
<i>Citrullus lanatus</i>	watermelon	1
<i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	job's tears	4
<i>Cucumis melo</i> var. <i>utilissimus</i>	oriental pickling melon	5
<i>Cucumis sativus</i>	cucumber / upland cucumber	5
<i>Cucurbita moschata</i>	pumpkin	14
<i>Eleusine coracana</i>	finger millet	3
<i>Lablab purpureus</i>	lablab bean	1
<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	12
<i>Luffa cylindrica</i>	luffa	14
<i>Oryza sativa</i>	upland rice	1
<i>Pachyrhizus erosus</i>	yam bean	1
<i>Sesamum indicum</i>	sesame	4
<i>Setaria italica</i>	foxtail millet	1
<i>Solanum melongena</i>	eggplant	2
<i>Sorghum bicolor</i>	sorghum	14
<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	24
<i>Zea mays</i>	waxy corn	15
Total		128

mixed and separated by seed color. L108 was red and L126 was black. There were 1 bottle gourd, 3 cowpea, 1 finger millet, 1 foxtail millet, 1 lablab bean, 1 luffa, 1 pumpkin, 1 upland cucumber, 1 watermelon, and 1 waxy corn.

Next, he visited Mokko Village, where villagers provided 10 accessions (Collection numbers L117-L125 and L127; Photos 116-125 and 127).

The accession, L117 was collected mixed with accession L127 and separated by seed color. L117 was red and L127 was black. There were 1 bottle gourd, 1 chili, 2 cowpea, 1 eggplant, 1 luffa, 1 pumpkin, 1 sorghum, 1 upland cucumber, and 1 waxy corn.

There was no data for sorghum collection numbers L128, but it was collected from either Mokthoyai Village or Mokko Village.

Day 6: December 31, 2022

Site: Oudom Xai Province, to Vientiane (capital)

Weather: Sunny

We moved from Muang Xai station to Vientiane station by train and to the Rice and Cash Crop Research Center (RCCRC).

From our survey, sorghum and other cereal crop landraces were found to be maintained in villages in Oudom Xai Province. However, these villages were far from towns. In addition, the roads to towns were not

maintained and it was sometimes difficult to reach there by cars. Hence, it was considered that local researchers collect seeds using motorcycle in such as remote mountain villages was effective.

The genetic resources collected during this survey will be subjected to further characterization and evaluation at the National Agriculture and Forestry Research Institute (NAFRI) in Laos and Genetic Resources Center, NARO in Japan.

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ラオスにおける植物遺伝資源の探索・収集，2022年12月

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和文摘要

本研究報告は、ジーンバンク事業の一環として、2022年12月26日から31日にかけて行われたラオス北部（ウドムサイ県）における海外植物遺伝資源の探索・収集に関するものである。本探索では、山脈にはさまれたへき地で、ソルガム等の穀物およびマメをはじめとする野菜等を主な対象作物とする探索を行った。その結果、ソルガム14点、アワ1点、シコクビエ3点、トウモロコシ15点、ササゲ24点、キュウリ5点、カボチャ14点をはじめとする植物遺伝資源128点を収集し、ラオスジーンバンクに保存した。今後、現地での特性調査や日本への導入を進める。

Table 3. Passport data of collected materials

No.	Coll. No.	JP No.	Coll. Date	Species name	English common name	Type of Sample	Local name	Status	Locality (Province, District, Village)	Latitude	Longitude	Altitude (m)	Topography - Site - Drainage	Remarks ¹⁾	Photo No.
1	2022-12-L1	289198	Dec. 27	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Good	PIH: 3-4 m, PaL: 37 cm, Mr. Bounthiem, Khamue tribe	Photo 1
2	2022-12-L2	289199	Dec. 27	<i>Zea mays</i>	waxy corn	Seed	Saloy	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIH: 150 cm, EaH: 100 cm, PaL: 11 cm, Ms. Huk, Khamue tribe	Photo 2
3	2022-12-L3	289200	Dec. 27	<i>Cucumis sativus</i>	cucumber	Seed	Mark teng lai	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIL: 5-6 m, FrL: 20 cm, Ms. Ra, Khamue tribe	Photo 3
4	2022-12-L4	289201	Dec. 27	<i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	job's tears	Seed	Mark deuy	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIH: 2 m, PaL: 20 cm, Ms. Ra, Khamue tribe	Photo 4
5	2022-12-L5	289202	Dec. 27	<i>Zea mays</i>	waxy corn	Seed	Saly	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIH: 3 m, EaH: 1 m, PaL: 17 cm, Ms. Peng, Khamue tribe	Photo 5
6	2022-12-L6	289203	Dec. 27	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIL: 10 m, FrD: 27 cm, Ms. Sen A, Khamue tribe	Photo 6
7	2022-12-L7	289204	Dec. 27	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIL: 10-13 m, FrD: 16 cm, Mr. Khamcheng, Khamue tribe	Photo 7
8	2022-12-L8	289205	Dec. 27	<i>Benincasa hispida</i>	wax gourd	Seed	Mark Ton	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIL: 4-5 m, FrL: 31 cm, Ms. Peng, Khamue tribe	Photo 8
9	2022-12-L9	289206	Dec. 27	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua fak yao	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIL: 4-5 m, PoL: 27-31 cm, Ms. Bounthiem, Khamue tribe	Photo 9
10	2022-12-L10	289207	Dec. 27	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua dam hai	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIL: 10 m, PoL: 18-22 cm, Mr. Leng, Khamue tribe	Photo 10
11	2022-12-L11	289208	Dec. 27	<i>Solanum melongena</i>	eggplant	Seed	Mark khua khom	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIH: 1.5 m, FrL: 6 cm, Ms. Doy, Khamue tribe	Photo 11
12	2022-12-L12	289209	Dec. 27	<i>Capsicum annuum</i>	chili	Seed	Mark phet noy	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIH: 80-90 cm, PoL: 5 cm, Ms. Doy, Khamue tribe	Photo 12
13	2022-12-L13	289210	Dec. 27	<i>Capsicum annuum</i>	chili	Seed	Mark phet yai	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIH: 90-100 cm, PoL: 6-9 cm, Ms. Doy, Khamue tribe	Photo 13
14	2022-12-L14	289211	Dec. 27	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIL: 3-4 m, FrL: 42 cm, Ms. Doy, Khamue tribe	Photo 14
15	2022-12-L15	289212	Dec. 27	<i>Luffa cylindrica</i>	luffa	Seed	Mark noi, Mark noi buab liam	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIL: 3-4 m, FrL: 37 cm, Ms. Doy, Khamue tribe	Photo 15
16	2022-12-L16	289213	Dec. 27	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark mum	Landrace	Oudom Xai, Pak Beng, Keng Xang	N19-54-05.1	E101-08-19.0	333	Mountainous - Slope - Moderate	PIL: 4-5 m, FrL: 40 cm, Ms. Doy, Khamue tribe	Photo 16
17	2022-12-L17	289214	Dec. 27	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIH: 2-3 m, PaL: 35 cm, Mr. Chanxay, Khamue tribe	Photo 17
18	2022-12-L18	289215	Dec. 27	<i>Zea mays</i>	waxy corn	Seed	Saly	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIH: 2 m, EaH: 110 cm, PaL: 14 cm, Ms. Phoun, Khamue tribe	Photo 18
19	2022-12-L19	289216	Dec. 27	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua dam	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIL: 5-6 m, PoL: 17-22 cm, Ms. Pheng, Khamue tribe	Photo 19
20	2022-12-L20	289217	Dec. 27	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab liam	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIL: 7-8 m, FrL: 37 cm, Ms. Chan, Khamue tribe	Photo 20
21	2022-12-L21	289218	Dec. 27	<i>Cucumis sativus</i>	cucumber	Seed	Mark teng ching	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIL: 2 m, FrL: 20-30 cm, Ms. Khun, Khamue tribe	Photo 21
22	2022-12-L22	289219	Dec. 27	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Mark thua deng lai	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIL: 3-4 m, PoL: 15-20 cm, Mr. Phoung, Khamue tribe	Photo 22
23	2022-12-L23	289220	Dec. 27	<i>Cucumis melo</i> var. <i>utilissimus</i>	oriental pickling melon	Seed	Mark teng lai	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIL: 3-4 m, FrL: 20-30 cm, Ms. Phoung, Khamue tribe	Photo 23

Table 3. (Continued).

No.	Coll. No.	JP No.	Coll. Date	Species name	English common name	Type of Sample	Local name	Status	Locality (Province, District, Village)	Latitude	Longitude	Altitude (m)	Topography - Site - Drainage	Remarks ¹⁾	Photo No.
24	2022-12-L24	289221	Dec. 27	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIL: 2-3 m, FrD: 20-30 cm, Ms. Chan, Khamue tribe	Photo 24
25	2022-12-L25	289222	Dec. 27	<i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	job's tears	Seed	Mark deuy	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIH: 1.5-1.8 m, PaL: 30-45 cm, Mr. Som, Khamue tribe	Photo 25
26	2022-12-L26	289223	Dec. 27	<i>Pachyrhizus erosus</i>	yam bean	Seed	Monphao	Landrace	Oudom Xai, Pak Beng, Hoy ka	N19-55-14.7	E101-06-09.9	412	Mountainous - Slope - Moderate	PIL: 2-3 m, PoL: 10-12 cm, Ms. Hieng, Khamue tribe	Photo 26
27	2022-12-L27	289224	Dec. 27	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua deng	Landrace	Oudom Xai, Pak Beng, Pak Ngeuy	N19-50-33.4	E101-03-11.4	352	Mountainous - Slope - Moderate	PIL: 2-3 m, Pod L: 15-18 cm, Ms. Thongchan, Lao tribe	Photo 27
28	2022-12-L28	289225	Dec. 27	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem	Landrace	Oudom Xai, Pak Beng, Pak Ngeuy	N19-50-33.4	E101-03-11.4	352	Mountainous - Slope - Moderate	PIH: 3 m, PaL: 31 cm, Ms. Houmphone, Lao tribe	Photo 28
29	2022-12-L29	289226	Dec. 27	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu	Landrace	Oudom Xai, Pak Beng, Pak Ngeuy	N19-50-33.4	E101-03-11.4	352	Mountainous - Slope - Moderate	PIL: 3-4 m, FrD: 20-30 cm, Ms. Phai, Lao tribe	Photo 29
30	2022-12-L30	289227	Dec. 27	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua khien khao, Thua tung	Landrace	Oudom Xai, Pak Beng, Pak Ngeuy	N19-50-33.4	E101-03-11.4	352	Mountainous - Slope - Moderate	PIL: 5-10m, PoL: 16-18 cm, Ms. Houmphone, Lao tribe	Photo 30
31	2022-12-L31	289228	Dec. 27	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab yao	Landrace	Oudom Xai, Pak Beng, Pak Ngeuy	N19-50-33.4	E101-03-11.4	352	Mountainous - Slope - Moderate	PIL: 3-4 m, FrL: 33 cm, Ms. Phai, Lao tribe	Photo 31
32	2022-12-L32	289229	Dec. 27	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab pom	Landrace	Oudom Xai, Pak Beng, Pak Ngeuy	N19-50-33.4	E101-03-11.4	352	Mountainous - Slope - Moderate	PIL: 3-4 m, FrL: 17 cm, Ms. Phai, Lao tribe	Photo 32
33	2022-12-L33	289230	Dec. 27	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num	Landrace	Oudom Xai, Pak Beng, Pak Ngeuy	N19-50-33.4	E101-03-11.4	352	Mountainous - Slope - Moderate	PIL: 3-4 m, Ms. Phai, Lao tribe	Photo 33
34	2022-12-L34	289231	Dec. 27	<i>Cucumis melo</i> var. <i>utilissimus</i>	oriental pickling melon	Seed	Mark teng lai	Landrace	Oudom Xai, Pak Beng, Pak Ngeuy	N19-50-33.4	E101-03-11.4	352	Mountainous - Slope - Moderate	PIL: 2-3 m, FrL: 20 cm, Mr. Xienglek, Lavi tribe	Photo 34
35	2022-12-L35	289232	Dec. 27	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num	Landrace	Oudom Xai, Pak Beng, Pak Ngeuy	N19-50-33.4	E101-03-11.4	352	Mountainous - Slope - Moderate	PIL: 2-3 m, FrL: 20-30 cm, Mr. Xienglek, Lavi tribe	Photo 35
36	2022-12-L36	289233	Dec. 28	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem dam	Landrace	Oudom Xai, Houn, Som X ay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIH: 2-3 m, PaL: 28 cm, Mr. Toulao, Khamue tribe	Photo 36
37	2022-12-L37	289234	Dec. 28	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem deng	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIH: 2-3 m, PaL: 37 cm, Mr. Toulao, Khamue tribe	Photo 37
38	2022-12-L38	289235	Dec. 28	<i>Eleusine coracana</i>	finger millet	Seed	Koy, Khao fang	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIH: 1.2 m, PaL: 16-19 cm, Mr. Sivone, Khamue tribe	Photo 38
39	2022-12-L39	289236	Dec. 28	<i>Zea mays</i>	waxy corn	Seed	Saly thong, Saly ek	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIH: 2 m, EaH: 90-100 cm, PaL: 13 cm, Mr. Sivone, Khamue tribe	Photo 39
40	2022-12-L40	289237	Dec. 28	<i>Zea mays</i>	waxy corn	Seed	Saly khao	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIH: 2 m, EaH: 90-100 cm, PaL: 11 cm, Mr. Sivone, Khamue tribe	Photo 40
41	2022-12-L41	289238	Dec. 28	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua yao	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIL: 10 m, PoL: 15-19 cm, Mr. Sivone, Khamue tribe	Photo 41
42	2022-12-L42	289239	Dec. 28	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua yao deng lai, Hom	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIL: 10 m, PoL: 18 cm, Mr. Sivone, Khamue tribe	Photo 42
43	2022-12-L43	289240	Dec. 28	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua yao mat khao	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIL: 10 m, PoL: 18-19 cm, Mr. Sivone, Khamue tribe	Photo 43
44	2022-12-L44	289241	Dec. 28	<i>Capsicum annuum</i>	chili	Seed	Mark phet	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIH: 1 m, PoL: 4-8 cm, Mr. Bounnong, Khamue tribe	Photo 44
45	2022-12-L45	289242	Dec. 28	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab hai yao	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIL: 4-5 m, EaH: 38 cm, FrL: 38 cm, Mr. Bounnong, Khamue tribe	Photo 45
46	2022-12-L46	289243	Dec. 28	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab hai noi	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIL: 4-5 m, FrL: 13 cm, Mr. Bounnong, Khamue tribe	Photo 46

Table 3. (Continued).

No.	Coll. No.	JP No.	Coll. Date	Species name	English common name	Type of Sample	Local name	Status	Locality (Province, District, Village)	Latitude	Longitude	Altitude (m)	Topography - Site - Drainage	Remarks ¹⁾	Photo No.
47	2022-12-L47	289244	Dec. 28	<i>Lagenaria siceraria</i> var. <i>sicwvaria</i>	bottle gourd	Seed	Mark num	Landrace	Oudom Xai, Houn, Som Xay	N20-10-35.6	E101-26-57.6	497	Mountainous - Slope - Moderate	PIL: 6-7 m, FrL: 93 cm, Mr. Chittovong, Khamue tribe	Photo 47
48	2022-12-L48	289245	Dec. 28	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem	Landrace	Oudom Xai, Houn, Vang tung	N20-11-10.3	E101-31-07.4	480	Mountainous - Slope - Moderate	PIH: 2-3 m, PaL: 31 cm, Bounteum, Khamue tribe	Photo 48
49	2022-12-L49	289246	Dec. 28	<i>Eleusine coracana</i>	finger millet	Seed	Koy, Khao fang ley	Landrace	Oudom Xai, Houn, Vang tung	N20-11-10.3	E101-31-07.4	480	Mountainous - Slope - Moderate	PIH: 1-1.2 m, PaL: 9-10 cm, Bounteum, Khamue tribe	Photo 49
50	2022-12-L50	289247	Dec. 28	<i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	job's tears	Seed	Mark deuy	Landrace	Oudom Xai, Houn, Vang tung	N20-11-10.3	E101-31-07.4	480	Mountainous - Slope - Moderate	PIH: 1.5 m, PaL: 20 cm, Mr. Thode, Khamue tribe	Photo 50
51	2022-12-L51	289248	Dec. 28	<i>Zea mays</i>	waxy corn	Seed	Saly pon	Landrace	Oudom Xai, Houn, Vang tung	N20-11-10.3	E101-31-07.4	480	Mountainous - Slope - Moderate	PIH: 2 m, EaH: 1-1.5 m, PaL: 10 cm, Mr. Cho, Khamue tribe	Photo 51
52	2022-12-L52	289249	Dec. 28	<i>Zea mays</i>	waxy corn	Seed	Saly	Landrace	Oudom Xai, Houn, Vang tung	N20-11-10.3	E101-31-07.4	480	Mountainous - Slope - Moderate	PIH: 2 m, EaH: 1.2-1.5 m, PaL: 15 cm, Mr. Thad, Khamue tribe	Photo 52
53	2022-12-L53	289250	Dec. 28	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua deng	Landrace	Oudom Xai, Houn, Vang tung	N20-11-10.3	E101-31-07.4	480	Mountainous - Slope - Moderate	PIL: 4 m, PoL: 17 cm, Mr. Bee, Khamue tribe	Photo 53
54	2022-12-L54	289251	Dec. 28	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua khao	Landrace	Oudom Xai, Houn, Vang tung	N20-11-10.3	E101-31-07.4	480	Mountainous - Slope - Moderate	PIL: 5-6 m, PoL: 17-20 cm, Mr. Bee, Khamue tribe	Photo 54
55	2022-12-L55	289252	Dec. 29	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem dam, Ja dam	Landrace	Oudom Xai, Houn, Mainue	N20-24-59.1	E101-40-24.1	588	Mountainous - Slope - Good	PIH: 3-3.5 m, PaL: 26 cm, Khamdor, Khamue tribe	Photo 55
56	2022-12-L56	289253	Dec. 29	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem deng, Ja dey	Landrace	Oudom Xai, Houn, Mainue	N20-24-59.1	E101-40-24.1	588	Mountainous - Slope - Good	PIH: 4 m, PaL: 28 cm, Khamdor, Khamue tribe	Photo 56
57	2022-12-L57	289254	Dec. 29	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua hai, Thua khao	Landrace	Oudom Xai, Houn, Mainue	N20-24-59.1	E101-40-24.1	588	Mountainous - Slope - Good	PIL: 10 m, PoL: 17 cm, Khamdor, Khamue tribe	Photo 57
58	2022-12-L58	289255	Dec. 29	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua hai khao, Thua hai khao dam	Landrace	Oudom Xai, Houn, Mainue	N20-24-59.1	E101-40-24.1	588	Mountainous - Slope - Good	PIL: 10 m, PoL: 14-19 cm, Khamdor, Khamue tribe	Photo 58
59	2022-12-L59	289256	Dec. 29	<i>Zea mays</i>	waxy corn	Seed	Saly hai	Landrace	Oudom Xai, Houn, Mainue	N20-24-59.1	E101-40-24.1	588	Mountainous - Slope - Good	PIH: 1.5 m, EaH: 70-80 cm, PaL: 12 cm, Khamdor, Khamue tribe	Photo 59
60	2022-12-L60	289257	Dec. 29	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num nouy mon	Landrace	Oudom Xai, Houn, Mainue	N20-24-59.1	E101-40-24.1	588	Mountainous - Slope - Good	PIL: 6-7 m, FrL: 18 cm, Khamdor, Khamue tribe	Photo 60
61	2022-12-L61	289258	Dec. 29	<i>Cucumis melo</i> var. <i>utilissimus</i>	oriental pickling melon	Seed	Teng lai	Landrace	Oudom Xai, Houn, Mainue	N20-24-59.1	E101-40-24.1	588	Mountainous - Slope - Good	PIL: 5 m, FrL: 17 cm, Ms. Boualoy, Khamue tribe	Photo 61
62	2022-12-L62	289259	Dec. 29	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu hai	Landrace	Oudom Xai, Houn, Mainue	N20-24-59.1	E101-40-24.1	588	Mountainous - Slope - Good	PIL: 6-7 m, FrD: 18 cm, Ms. Boualoy, Khamue tribe	Photo 62
63	2022-12-L63	289260	Dec. 29	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num yao	Landrace	Oudom Xai, Houn, Mainue	N20-24-59.1	E101-40-24.1	588	Mountainous - Slope - Good	PIL: 6-7 m, FrL: 65 cm, Ms. Boualoy, Khamue tribe	Photo 63
64	2022-12-L64	289261	Dec. 29	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem, Khao fang	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PIH: 3 m, PaL: 31 cm, Mr. Sengvone, Lue tribe	Photo 64
65	2022-12-L65	289262	Dec. 29	<i>Zea mays</i>	waxy corn	Seed	Saly noy	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PIH: 2 m, EaH: 1.2 m, PaL: 10-12 cm, Ms. Keo, Lue tribe	Photo 65
66	2022-12-L66	289263	Dec. 29	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua dam	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PIL: 70-90 cm, PoL: 16-20 cm, Ms. Keo, Lue tribe	Photo 66
67	2022-12-L67	289264	Dec. 29	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua khuang, Thua khuang deng	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PIL: 4-5 m, PoL: 16-20 cm, Ms. Keo, Lue tribe	Photo 67
68	2022-12-L68	289265	Dec. 29	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu hua juk	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PIL: 7-8 m, FrD: 20-30 cm, Ms. Sompheng, Lue tribe	Photo 68
69	2022-12-L69	289266	Dec. 29	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu nung khun khak	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PIL: 6-7 m, FrD: 40-50 cm, Ms. Kongfong, Lue tribe	Photo 69

Table 3. (Continued).

No.	Coll. No.	JP No.	Coll. Date	Species name	English common name	Type of Sample	Local name	Status	Locality (Province, District, Village)	Latitude	Longitude	Altitude (m)	Topography - Site - Drainage	Remarks ¹⁾	Photo No.
70	2022-12-L70	289267	Dec. 29	<i>Cucumis melo</i> var. <i>utilissimus</i>	oriental pickling melon	Seed	Mark teng lai	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PL: 5-6 m, FrL: 30 cm, Mr. Vanxay, Lue tribe	Photo 70
71	2022-12-L71	289268	Dec. 29	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num ,Mark nen	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PL: 4-5 m, FrL: 50-60 cm, Ms. Tha, Lue tribe	Photo 71
72	2022-12-L72	289269	Dec. 29	<i>Arachis hypogaea</i>	groundnut	Seed	Thua din	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PIH: 40-50 cm, PoL: 3-4 cm, Ms. Onsy, Lue tribe	Photo 72
73	2022-12-L73	289270	Dec. 29	<i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	job's tears	Seed	Mark duey lak	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PIH: 2 m, PaL: 50 cm, Ms. Onsy, Lue tribe	Photo 73
74	2022-12-L74	289271	Dec. 29	<i>Sesamum indicum</i>	sesame	Seed	Mark nga	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PIH: 1-1.5 m, PoL: 2-3 cm, Ms. Bouaphone, Lue tribe	Photo 74
75	2022-12-L75	289272	Dec. 29	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab yao	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PL: 3-4 m, FrL: 62 cm, Ms. Khongfong, Lue tribe	Photo 75
76	2022-12-L76	289273	Dec. 29	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab sun, Mark buab sum sun	Landrace	Oudom Xai, Beng, Nalay	N20-20-26.1	E101-40-33.1	534	Mountainous - Slope - Good	PL: 3-4 m, FrL: 28 cm, Ms. Khongfong, Lue tribe	Photo 76
77	2022-12-L77	289274	Dec. 29	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem	Landrace	Oudom Xai, Beng, Numdor	N20-17-58.3	E101-37-06.3	538	Mountainous - Slope - Moderate	PIH: 2-3 m, PaL: 37 cm, Mr. Bountin, Khamue tribe	Photo 77
78	2022-12-L78	289275	Dec. 29	<i>Zea mays</i>	waxy corn	Seed	Saly, Saly luang	Landrace	Oudom Xai, Beng, Numdor	N20-17-58.3	E101-37-06.3	538	Mountainous - Slope - Moderate	PIH: 1.5-1.8 m, EaH: 80-90 cm, PaL: 15 cm, Mr. Bountin, Khamue tribe	Photo 78
79	2022-12-L79	289276	Dec. 29	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu deng	Landrace	Oudom Xai, Beng, Numdor	N20-17-58.3	E101-37-06.3	538	Mountainous - Slope - Moderate	PL: 3 m, FrD: 30-40 cm, Mr. Bountin, Khamue tribe	Photo 79
80	2022-12-L80	289277	Dec. 29	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua hai, Thua bong	Landrace	Oudom Xai, Beng, Numdor	N20-17-58.3	E101-37-06.3	538	Mountainous - Slope - Moderate	PL: 3-4 m, PoL: 13-18 cm, Mr. Bountin, Khamue tribe	Photo 80
81	2022-12-L81	289278	Dec. 29	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua hai pea	Landrace	Oudom Xai, Beng, Numdor	N20-17-58.3	E101-37-06.3	538	Mountainous - Slope - Moderate	PL: 4-5 m, PoL: 22-25 cm, Mr. Bountin, Khamue tribe	Photo 81
82	2022-12-L82	289279	Dec. 29	<i>Sesamum indicum</i>	sesame	Seed	Mark nga khao	Landrace	Oudom Xai, Beng, Numdor	N20-17-58.3	E101-37-06.3	538	Mountainous - Slope - Moderate	PIH: 2.5 m, PoL: 2-2.5 cm, Mr. Bountin, Khamue tribe	Photo 82
83	2022-12-L83	289280	Dec. 29	<i>Sesamum indicum</i>	sesame	Seed	Mark nga dam	Landrace	Oudom Xai, Beng, Numdor	N20-17-58.3	E101-37-06.3	538	Mountainous - Slope - Moderate	PIH: 2.5 m, PoL: 2-2.5 cm, Mr. Bountin, Khamue tribe	Photo 83
84	2022-12-L84	289281	Dec. 30	<i>Sorghum bicolor</i>	sorghum	Seed	Ting koy, Aoyniem	Landrace	Oudom Xai, Beng, Na ngam	N20-39-04.8	E101-52-22.4	693	Mountainous - Slope - Good	PIH: 3 m, PaL: 35 cm, Ms. Kham, Khamue tribe	Photo 84
85	2022-12-L85	289282	Dec. 30	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua sa bai, Thua dam	Landrace	Oudom Xai, Beng, Na ngam	N20-39-04.8	E101-52-22.4	693	Mountainous - Slope - Moderate	PL: 6-10 m, PoL: 24-26 cm, Ms. Kham, Khamue tribe	Photo 85
86	2022-12-L86	289283	Dec. 30	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Thua khao, Sa bai khon	Landrace	Oudom Xai, Beng, Na ngam	N20-39-04.8	E101-52-22.4	693	Mountainous - Slope - Moderate	PL: 6-10 m, PoL: 24-26 cm, Ms. Kham, Khamue tribe	Photo 86
87	2022-12-L87	289284	Dec. 30	<i>Zea mays</i>	waxy corn	Seed	Saly niew	Landrace	Oudom Xai, Beng, Na ngam	N20-39-04.8	E101-52-22.4	693	Mountainous - Slope - Moderate	PIH: 2 m, EaH: 1.2 m, PaL: 10-11 cm, Ms. In, Khamue tribe	Photo 87
88	2022-12-L88	289285	Dec. 30	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu, Mon kieng	Landrace	Oudom Xai, Beng, Na ngam	N20-39-04.8	E101-52-22.4	693	Mountainous - Slope - Moderate	PL: 3-4 m, FrD: 19 cm, Ms. Khao, Khamue tribe	Photo 88
89	2022-12-L89	289286	Dec. 30	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab	Landrace	Oudom Xai, Beng, Na ngam	N20-39-04.8	E101-52-22.4	693	Mountainous - Slope - Moderate	PL: 3-5 m, FrL: 46 cm, Ms. Khao, Khamue tribe	Photo 89
90	2022-12-L90	289287	Dec. 30	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num	Landrace	Oudom Xai, Beng, Na ngam	N20-39-04.8	E101-52-22.4	693	Mountainous - Slope - Moderate	PL: 4-5 m, FrL: 70 cm, Ms. Phueng, Khamue tribe	Photo 90
91	2022-12-L91	289288	Dec. 30	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num yao	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PL: 4-5 m, FrL: 50-60 cm, Ms. Chankham, Khamue tribe	Photo 91
92	2022-12-L92	289289	Dec. 30	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num yao	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PL: 3-5 m, FrL: 40-60 cm, Mr. Porlao, Mong tribe	Photo 92

Table 3. (Continued).

No.	Coll. No.	JP No.	Coll. Date	Species name	English common name	Type of Sample	Local name	Status	Locality (Province, District, Village)	Latitude	Longitude	Altitude (m)	Topography - Site - Drainage	Remarks ¹⁾	Photo No.
93	2022-12-L93	289290	Dec. 30	<i>Luffa cylindrica</i>	luffa	Seed	Mark boab noy mon	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PL: 3-4 m, FrL: 8 cm, Ms. Chanty, Khamue tribe	Photo 93
94	2022-12-L94	289291	Dec. 30	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu mon deng	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PL: 4-5 m, FrD: 20-30 cm, Mr. Porlao, Mong tribe	Photo 94
95	2022-12-L95	289292	Dec. 30	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu khao	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PL: 4-5 m, FrD: 30-40 cm, Ms. Chankham, Khamue tribe	Photo 95
96	2022-12-L96	289293	Dec. 30	<i>Zea mays</i>	waxy corn	Seed	Saly, Saly dam	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PIH: 2 m, EaH: 1.2 m, PaL: 10 cm, Ms. Chanty, Khamue tribe	Photo 96
97	2022-12-L97	289294	Dec. 30	<i>Cucumis sativus</i>	upland cucumber	Seed	Mark teng ching	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PL: 3-5 m, FrL: 20-25 cm, Mr. Porlao, Mong tribe	Photo 97
98	2022-12-L98	289295	Dec. 30	<i>Cucumis melo</i> var. <i>utilissimus</i>	oriental pickling melon	Seed	Mark teng lai	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PL: 4-5 m, FrL: 20-25 cm, Ms. Chankham, Khamue tribe	Photo 98
99	2022-12-L99	289296	Dec. 30	<i>Oryza sativa</i>	upland rice	Seed	Khao hai, Khao way, Khao niaw	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PIH: 1.5 m, PaL: 20 cm, Ms. Chankham, Khamue tribe	Photo 99
100	2022-12-L100	289297	Dec. 30	<i>Sesamum indicum</i>	sesame	Seed	Mark nga khao	Landrace	Oudom Xai, Xay, Namon	N20-35-10.3	E101-55-53.1	793	Mountainous - Slope - Moderate	PIH: 1.5 m, PoL: 2.5-3 cm, Ms. Vone, Khamue tribe	Photo 100
101	2022-12-L101	289298	Dec. 30	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem	Landrace	Oudom Xai, Xay, Phonhom	N20-48-27.7	E101-56-42.7	685	Mountainous - Slope - Moderate	PIH: 3-4 m, PaL: 40 cm, Mr. Khamhuk, Khamue tribe	Photo 101
102	2022-12-L102	289299	Dec. 30	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab	Landrace	Oudom Xai, Xay, Phonhom	N20-48-27.7	E101-56-42.7	685	Mountainous - Slope - Moderate	PL: 6-7 m, FrL: 23 cm, Ms. Lee, Khamue tribe	Photo 102
103	2022-12-L103	289300	Dec. 30	<i>Zea mays</i>	waxy corn	Seed	Saly niaw	Landrace	Oudom Xai, Xay, Phonhom	N20-48-27.7	E101-56-42.7	685	Mountainous - Slope - Moderate	PIH: 2 m, EaH: 1.5 m, PaL: 8-9 cm, Ms. Seng, Khamue tribe	Photo 103
104	2022-12-L104	289301	Dec. 30	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu	Landrace	Oudom Xai, Xay, Phonhom	N20-48-27.7	E101-56-42.7	685	Mountainous - Slope - Moderate	PL: 10 m, FrD: 18 cm, Ms. Lee, Khamue tribe	Photo 104
105	2022-12-L105	289302	Dec. 30	<i>Capsicum annuum</i>	chili	Seed	Mark phet noy	Landrace	Oudom Xai, Xay, Phonhom	N20-48-27.7	E101-56-42.7	685	Mountainous - Slope - Moderate	PIH: 1 m, PoL: 4-5 cm, Mr. Khamhuk, Khamue tribe	Photo 105
106	2022-12-L106	289303	Dec. 30	<i>Setaria italica</i>	foxtail millet	Seed	Koy, Kaofang hang ma	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 106
107	2022-12-L107	289304	Dec. 30	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 107
108	2022-12-L108	289305	Dec. 30	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Mark thua hai	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	This was collected mixed with accession L126 and separated by seed color. Provider: unknown	Photo 108
109	2022-12-L109	289306	Dec. 30	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 109
110	2022-12-L110	289307	Dec. 30	<i>Zea mays</i>	waxy corn	Seed	Saly	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 110
111	2022-12-L111	289308	Dec. 30	<i>Citrullus lanatus</i>	watermelon	Seed	Mark mo	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 111
112	2022-12-L112	289309	Dec. 30	<i>Vigna unguiculata</i> cv-gr. <i>Unguiculata</i>	cowpea	Seed	Mark thua deng lai	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 112
113	2022-12-L113	289310	Dec. 30	<i>Cucumis sativus</i>	upland cucumber	Seed	Mark teng hai	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 113
114	2022-12-L114	289311	Dec. 30	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 114
115	2022-12-L115	289312	Dec. 30	<i>Lablab purpureus</i>	lablab bean	Seed	Mark paep	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 115

Table 3. (Continued).

No.	Coll. No.	JP No.	Coll. Date	Species name	English common name	Type of Sample	Local name	Status	Locality (Province, District, Village)	Latitude	Longitude	Altitude (m)	Topography - Site - Drainage	Remarks ¹⁾	Photo No.
116	2022-12-L116	289313	Dec. 30	<i>Eleusine coracana</i>	finger millet	Seed	Kaofang lebmue nang	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 116
117	2022-12-L117	289314	Dec. 30	<i>Vigna unguiculata</i> cv-gr. Unguiculata	cowpea	Seed	Mark thua deng lai	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	This was collected mixed with accession L127 and separated by seed color. Provider: unknown	Photo 117
118	2022-12-L118	289315	Dec. 30	<i>Zea mays</i>	waxy corn	Seed	Saly	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 118
119	2022-12-L119	289316	Dec. 30	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 119
120	2022-12-L120	289317	Dec. 30	<i>Lagenaria siceraria</i> var. <i>siceraria</i>	bottle gourd	Seed	Mark num	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 120
121	2022-12-L121	289318	Dec. 30	<i>Solanum melongena</i>	eggplant	Seed	Mark khua	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 121
122	2022-12-L122	289319	Dec. 30	<i>Capsicum annuum</i>	chili	Seed	Mark phet	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 122
123	2022-12-L123	289320	Dec. 30	<i>Cucurbita moschata</i>	pumpkin	Seed	Mark eu	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 123
124	2022-12-L124	289321	Dec. 30	<i>Cucumis sativus</i>	upland cucumber	Seed	Mark teng hai	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 124
125	2022-12-L125	289322	Dec. 30	<i>Luffa cylindrica</i>	luffa	Seed	Mark buab	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 125
126	2022-12-L126	289323	Dec. 30	<i>Vigna unguiculata</i> cv-gr. Unguiculata	cowpea	Seed	Mark thua hai	no data	Oudom Xai, Pak Beng, Mokthoyai	(N19-54-00.0)	(E101-08-00.0)	no data	no data	This was isolated from accession L108 because black seed color. Provider: unknown	Photo 126
127	2022-12-L127	289324	Dec. 30	<i>Vigna unguiculata</i> cv-gr. Unguiculata	cowpea	Seed	Mark thua deng lai	no data	Oudom Xai, Pak Beng, Mokko	(N19-54-00.0)	(E101-08-00.0)	no data	no data	This was isolated from accession L117 because black seed color. Provider: unknown	Photo 127
128	2022-12-L128	289325	Dec. 30	<i>Sorghum bicolor</i>	sorghum	Seed	Aoyniem	no data	Oudom Xai, unknown, unknown	(N19-54-00.0)	(E101-08-00.0)	no data	no data	Provider: unknown	Photo 128

¹⁾ PIH: Plant Height, PIL: Plant Length, PaL: Panicle Length, PoL: Pod Length, EaH: Ear Height, FrL: Fruit Length, FrD: Fruit Diameter



Photo 1.
Sorghum,
JP289198 (L1),
Sorghum bicolor



Photo 2.
Waxy corn,
JP289199 (L2),
Zea mays



Photo 3.
Cucumber,
JP289200 (L3),
Cucumis sativus



Photo 4.
Job's tears,
JP289201 (L4),
Coix lacryma-jobi var. *ma-yuen*



Photo 5.
Waxy corn,
JP289202 (L5),
Zea mays



Photo 6.
Pumpkin,
JP289203 (L6),
Cucurbita moschata



Photo 7.
Pumpkin,
JP289204 (L7),
Cucurbita moschata



Photo 8.
Wax gourd,
JP289205 (L8),
Benincasa hispida



Photo 9.
Cowpea,
JP289206 (L9),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 10.
Cowpea,
JP289207 (L10),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 11.
Eggplant,
JP289208 (L11),
Solanum melongena



Photo 12.
Chili,
JP289209 (L12),
Capsicum annuum



Photo 13.
Chili,
JP289210 (L13),
Capsicum annuum



Photo 14.
Luffa,
JP289211 (L14),
Luffa cylindrica



Photo 15.
Luffa,
JP289212 (L15),
Luffa cylindrica



Photo 16.
Bottle gourd,
JP289213 (L16),
Lagenaria siceraria var. *siceraria*



Photo 17.
Sorghum,
JP289214 (L17),
Sorghum bicolor



Photo 18.
Waxy corn,
JP289215 (L18),
Zea mays



Photo 19.
Cowpea,
JP289216 (L19),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 20.
Luffa,
JP289217 (L20),
Luffa cylindrica



Photo 21.
Cucumber,
JP289218 (L21),
Cucumis sativus



Photo 22.
Cowpea,
JP289219 (L22),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 23.
Oriental pickling melon,
JP289220 (L23),
Cucumis melo var. *utilissimus*



Photo 24.
Pumpkin,
JP289221 (L24),
Cucurbita moschata



Photo 25.
Job's tears,
JP289222 (L25),
Coix lacryma-jobi var. *ma-yuen*



Photo 26.
Yam bean,
JP289223 (L26),
Pachyrhizus erosus



Photo 27.
Cowpea,
JP289224 (L27),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 28.
Sorghum,
JP289225 (L28),
Sorghum bicolor



Photo 29.
Pumpkin,
JP289226 (L29),
Cucurbita moschata



Photo 30.
Cowpea,
JP289227 (L30),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 31.
Luffa,
JP289228 (L31),
Luffa cylindrica



Photo 32.
Luffa,
JP289229 (L32),
Luffa cylindrica



Photo 33.
Bottle gourd,
JP289230 (L33),
Lagenaria siceraria var. *siceraria*



Photo 34.
Oriental pickling melon,
JP289231 (L34),
Cucumis melo var. *utilissimus*



Photo 35.
Bottle gourd,
JP289232 (L35),
Lagenaria siceraria var. *siceraria*

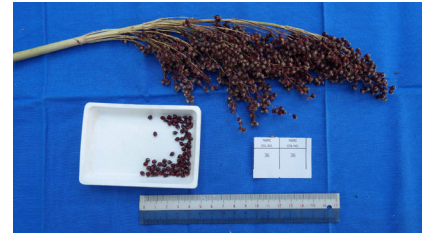


Photo 36.
Sorghum,
JP289233 (L36),
Sorghum bicolor



Photo 37.
Sorghum,
JP289234 (L37),
Sorghum bicolor



Photo 38.
Finger millet,
JP289235 (L38),
Eleusine coracana



Photo 39.
Waxy corn,
JP289236 (L39),
Zea mays



Photo 40.
Waxy corn,
JP289237 (L40),
Zea mays



Photo 41.
Cowpea,
JP289238 (L41),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 42.
Cowpea,
JP289239 (L42),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 43.
Cowpea,
JP289240 (L43),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 44.
Chili,
JP289241 (L44),
Capsicum annuum



Photo 45.
Luffa,
JP289242 (L45),
Luffa cylindrica



Photo 46.
Luffa,
JP289243 (L46),
Luffa cylindrica



Photo 47.
Bottle gourd,
JP289244 (L47),
Lagenaria siceraria var. *siceraria*



Photo 48.
Sorghum,
JP289245 (L48),
Sorghum bicolor



Photo 52.
Waxy corn,
JP289249 (L52),
Zea mays



Photo 53.
Cowpea,
JP289250 (L53),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 54.
Cowpea,
JP289251 (L54),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 55.
Sorghum,
JP289252 (L55),
Sorghum bicolor



Photo 56.
Sorghum,
JP289253 (L56),
Sorghum bicolor



Photo 57.
Cowpea,
JP289254 (L57),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 58.
Cowpea,
JP289255 (L58),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 59.
Waxy corn,
JP289256 (L59),
Zea mays



Photo 60.
Bottle gourd,
JP289257 (L60),
Lagenaria siceraria var. *siceraria*



Photo 61.
Oriental pickling melon,
JP289258 (L61),
Cucumis melo var. *utilissimus*



Photo 62.
Pumpkin,
JP289259 (L62),
Cucurbita moschata



Photo 63.
Bottle gourd,
JP289260 (L63),
Lagenaria siceraria var. *siceraria*



Photo 64.
Sorghum,
JP289261 (L64),
Sorghum bicolor



Photo 65.
Waxy corn,
JP289262 (L65),
Zea mays



Photo 66.
Cowpea,
JP289263 (L66),
Vigna unguiculata cv-gr. Unguiculata



Photo 67.
Cowpea,
JP289264 (L67),
Vigna unguiculata cv-gr. Unguiculata

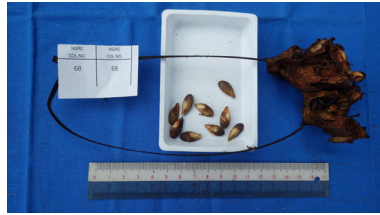


Photo 68.
Pumpkin,
JP289265 (L68),
Cucurbita moschata



Photo 69.
Pumpkin,
JP289266 (L69),
Cucurbita moschata



Photo 70.
Oriental pickling melon,
JP289267 (L70),
Cucumis melo var. *utilissimus*



Photo 71.
Bottle gourd,
JP289268 (L71),
Lagenaria siceraria var. *siceraria*



Photo 72.
Groundnut,
JP289269 (L72),
Arachis hypogaea



Photo 73.
Job's tears,
JP289270 (L73),
Coix lacryma-jobi var. *ma-yuen*

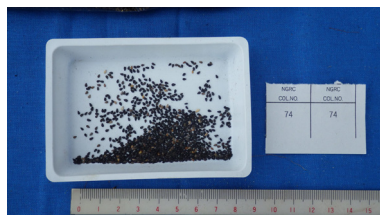


Photo 74.
Sesame,
JP289271 (L74),
Sesamum indicum



Photo 75.
Luffa,
JP289272 (L75),
Luffa cylindrica



Photo 76.
Luffa,
JP289273 (L76),
Luffa cylindrica



Photo 77.
Sorghum,
JP289274 (L77),
Sorghum bicolor



Photo 78.
Waxy corn,
JP289275 (L78),
Zea mays

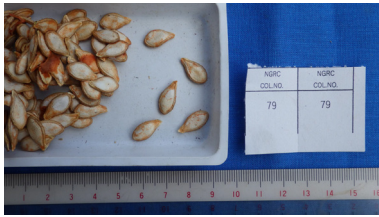


Photo 79.
Pumpkin,
JP289276 (L79),
Cucurbita moschata



Photo 80.
Cowpea,
JP289277 (L80),
Vigna unguiculata cv-gr. Unguiculata



Photo 81.
Cowpea,
JP289278 (L81),
Vigna unguiculata cv-gr. Unguiculata

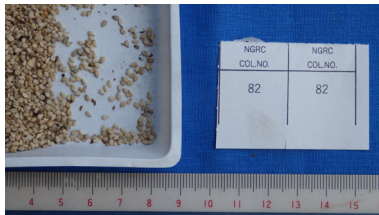


Photo 82.
Sesame,
JP289279 (L82),
Sesamum indicum

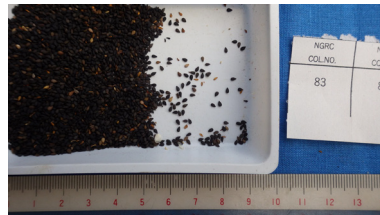


Photo 83.
Sesame,
JP289280 (L83),
Sesamum indicum



Photo 84.
Sorghum,
JP289281 (L84),
Sorghum bicolor



Photo 85.
Cowpea,
JP289282 (L85),
Vigna unguiculata cv-gr. Unguiculata



Photo 86.
Cowpea,
JP289283 (L86),
Vigna unguiculata cv-gr. Unguiculata



Photo 87.
Waxy corn,
JP289284 (L87),
Zea mays



Photo 88.
Pumpkin,
JP289285 (L88),
Cucurbita moschata



Photo 89.
Luffa,
JP289286 (L89),
Luffa cylindrica



Photo 90.
Bottle gourd,
JP289287 (L90),
Lagenaria siceraria var. *siceraria*



Photo 91.
Bottle gourd,
JP289288 (L91),
Lagenaria siceraria var. *siceraria*



Photo 92.
Bottle gourd,
JP289289 (L92),
Lagenaria siceraria var. *siceraria*



Photo 93.
Luffa,
JP289290 (L93),
Luffa cylindrica

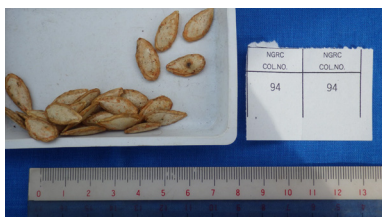


Photo 94.
Pumpkin,
JP289291 (L94),
Cucurbita moschata



Photo 95.
Pumpkin,
JP289292 (L95),
Cucurbita moschata



Photo 96.
Waxy corn,
JP289293 (L96),
Zea mays



Photo 97.
Upland cucumber,
JP289294 (L97),
Cucumis sativus



Photo 98.
Oriental pickling melon,
JP289295 (L98),
Cucumis melo var. *utilissimus*



Photo 99.
Upland rice,
JP289296 (L99),
Oryza sativa

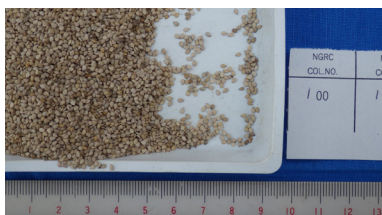


Photo 100.
Sesame,
JP289297 (L100),
Sesamum indicum



Photo 101.
Sorghum,
JP289298 (L101),
Sorghum bicolor



Photo 102.
Luffa,
JP289299 (L102),
Luffa cylindrica



Photo 103.
Waxy corn,
JP289300 (L103),
Zea mays



Photo 104.
Pumpkin,
JP289301 (L104),
Cucurbita moschata



Photo 105.
Chili,
JP289302 (L105),
Capsicum annuum



Photo 106.
Foxtail millet,
JP289303 (L106),
Setaria italica



Photo 107.
Pumpkin,
JP289304 (L107),
Cucurbita moschata



Photo 108.
Cowpea,
JP289305 (L108),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 109.
Bottle gourd,
JP289306 (L109),
Lagenaria siceraria var. *siceraria*



Photo 110.
Waxy corn,
JP289307 (L110),
Zea mays



Photo 111.
Watermelon,
JP289308 (L111),
Citrullus lanatus



Photo 112.
Cowpea,
JP289309 (L112),
Vigna unguiculata cv-gr. *Unguiculata*



Photo 113.
Upland cucumber,
JP289310 (L113),
Cucumis sativus



Photo 114.
Luffa,
JP289311 (L114),
Luffa cylindrica



Photo 115.
Lablab bean,
JP289312 (L115),
Lablab purpureus



Photo 116.
Finger millet,
JP289313 (L116),
Eleusine coracana



Photo 117.
Cowpea,
JP289314 (L117),
Vigna unguiculata cv-gr. *Unguiculata*

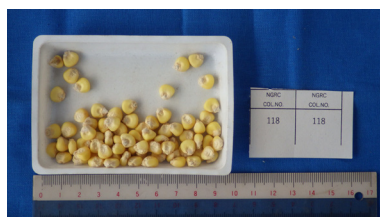


Photo 118.
Waxy corn,
JP289315 (L118),
Zea mays



Photo 119.
Sorghum,
JP289316 (L119),
Sorghum bicolor



Photo 120.
Bottle gourd,
JP289317 (L120),
Lagenaria siceraria var. *siceraria*

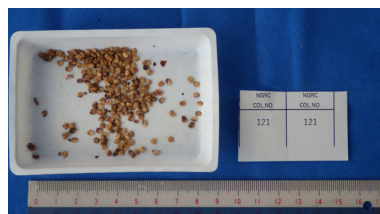


Photo 121.
Eggplant,
JP289318 (L121),
Solanum melongena

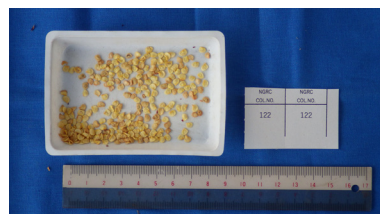


Photo 122.
Chili,
JP289319 (L122),
Capsicum annuum



Photo 123.
Pumpkin,
JP289320 (L123),
Cucurbita moschata



Photo 124.
Upland cucumber,
JP289321 (L124),
Cucumis sativus



Photo 125.
Luffa,
JP289322 (L125),
Luffa cylindrica



Photo 126.
Cowpea,
JP289323 (L126),
Vigna unguiculata cv-gr. Unguiculata



Photo 127.
Cowpea,
JP289324 (L127),
Vigna unguiculata cv-gr. Unguiculata

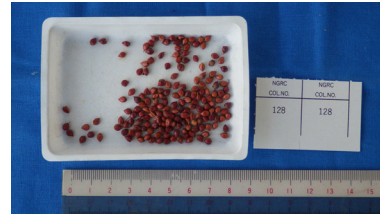


Photo 128.
Sorghum,
JP289325 (L128),
Sorghum bicolor