

## Collaborative Field Exploration and Collection of Plant Genetic Resources in Laos, February 2020

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### Summary

A collaborative survey of plant genetic resources was carried out in the Attapeu and Champasak provinces of the Lao People's Democratic Republic. Sorghum, maize, and beans were the main targets of the survey from February 11 to 22, 2020 (12 days). A total of 164 accessions of 25 species (26 different crops) were collected, including 8 *Sorghum bicolor*, 3 *Setaria italica*, 8 *Eleusine esculenta*, 20 *Zea mays*, 3 *Vigna radiata*, 2 *V. umbellata*, 29 *V. unguiculata*, 4 *V. unguiculata* var. *sesquipedalis*, 17 *Cucumis sativus*, and 13 *Cucurbita moschata* accessions.

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

### Introduction

Sorghum and other millets have been surveyed in several countries, such as Kenya, Bhutan, and Cambodia (Okuizumi *et al.* 2007, 2017, 2020; Tomooka *et al.* 2008; Ebina *et al.* 2012; Sreynech *et al.* 2016).

Since 2006, the National Institute of Agrobiological Sciences (NIAS) and National Agriculture and Forestry Research Institute (NAFRI) have conducted collaborative surveys and collection expeditions in Laos for plant genetic resources under the Memorandum of

Agreement (MOA) and Memorandum of Understanding (MOU) contracts (Sakata *et al.* 2008; Saito *et al.* 2009; Matsunaga *et al.* 2010).

The NIAS of Japan and NAFRI of Laos established the Joint Research Agreement (JRA) in 2014. The NIAS and NAFRI planned a collaborative survey in Laos for plant genetic resources. All obligations and rights of the NIAS under the JRA were transferred to the National Agriculture and Food Research Organization (NARO) owing to a merger between the NARO and the NIAS in

April 2016.

Surveys of cereal crop genetic resources in Laos have been conducted in the provinces of Xieng Khouang, Houa Phan, Bolikhamsay, Khammouane, Oudomsay, Luang Namtha, Bokeo, Phongsaly, Luang Prabang, Sainyabouri, Phonsavan, and the country's capital city Vientiane (Kawase *et al.* 2012; Okuizumi *et al.* 2011, 2013, 2015a, 2015b, 2016, 2019; Yamamoto *et al.* 2015a, 2015b; Saito *et al.* 2015; Vilayheuang *et al.* 2015).

In the present survey, we visited the Attapeu and Champasak provinces, and our survey mainly focused on collecting sorghum, beans, other millets, and vegetables, which are the most important crops in Laos. The survey involved both Japanese and Laotian researchers.

The places were selected based on the following information:

- 1, Sorghum has not been surveyed in these areas thus far.
- 2, Ethnic minorities with landraces were expected in mountainous areas at the national border.
- 3, When Survey was performed in Cambodia side of the border between Laos and Cambodia, Cambodians told that there is sorghum landrace in the southern part of Laos.

## Methods

The survey was conducted for 12 days, from February 11 to 22, 2020 (Table 1). We visited two provinces during the field trip (Fig. 1). Although harvesting is normally performed at the end of the rainy season, we visited the areas during the dry season because access is poor via muddy roads during the rainy season.

A rental car was used for transportation across the study sites. The survey team included a researcher from the NARO, two researchers from the NAFRI, and a Laotian driver. The samples were collected from villagers. 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.

Table 1. Itinerary of the survey in Laos (2020)

Day	Date	Day of Week	Itinerary Province (Village, District, Province)	Collection #
1	Feb. 11	Tue	Vientiane (capital) - Champasak P (Pakse City)	
2	Feb. 12	Wed	Champasak P - Attapeu P (Dak Sum V, Dak Sa Mo V, Dak Pa Du Mai V, Sarnxay D, Attapeu P)	1-43
3	Feb. 13	Thu	Attapeu P (Mai Tha Vone V, Dak La V, Nam Gon Nuan V, Sarnxay D)	44-80
4	Feb. 14	Fri	Attapeu P (Nong Kai Aok V, Vang Taf Noi V, Nong Far Mai V, Sarnxay D)	81-94
5	Feb. 15	Sat	Attapeu (Nong Far Mai V, Sarnxay D)	95-100
6	Feb. 16	Sun	Champasack P (Hong Hair V, Lat V, Phone V, Sukumma D)	101-120
7	Feb. 17	Mon	Champasack P (Nondeng V, Kokkong V, Sukumma D)	121-128
8	Feb. 18	Tue	Champasack P (Houei Xai V, Mounlapamok D)	129-142
9	Feb. 19	Wed	Champasack P (Na Nong Hiay V, Kong D)	143-156
10	Feb. 20	Thu	Champasack P (Xot V, Napa Kiap V, Kong D)	157-164
11	Feb. 21	Fri	Pakse City - Paxon City	
12	Feb. 22	Sat	Paxon City - Vientiane (capital)	

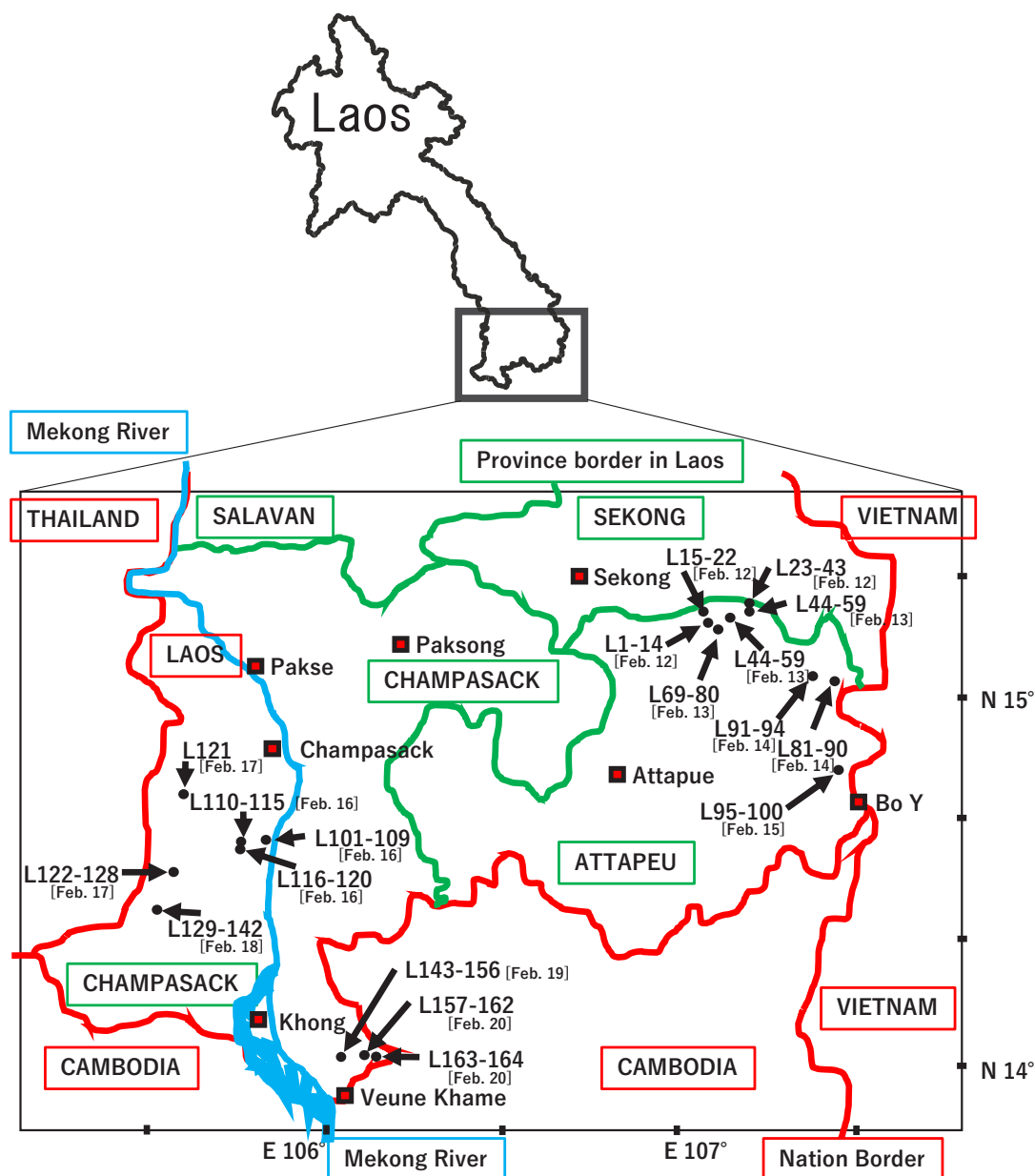


Fig. 1. Map of Laos and the collection sites. The L Number indicates the collected sample number [collection date].

## Results of the Survey

We visited two provinces in southern Laos and collected 164 accessions (Tables 2 and 3) of plant genetic resources as follows.

Day 1: February 11, 2020

Site: Vientiane (capital) to Pakse City, Champasak Province

Weather: Sunny

We moved from Rice Research Center (RRC) to a hotel in Pakse.

Day 2: February 12, 2020

Site: Sarnxay District, Attapeu Province

Weather: Sunny

Collection number: 1-43

We left the hotel in Pakse City and moved to Sarnxay District, Attapeu Province. First, we visited the Alak tribe in Dak Sum Village, where 11 villagers provided 14 accessions (Collection numbers 2020-02-L1 to 2020-02-L14 in Table 3; hereafter, L1 - L14; Photos 1 - 14) from the mountainous area. There were 2 sorghum accessions (L1 and L2, Photos 1 and 2), 1 finger millet accession (L3, Photo 3), 2 maize accessions (L4 and L5, Photos 4 and 5), 1 peanut accession (L6, Photo 6), 1 cowpea accession (L7, Photo 7), 1 cucumber accession (L8, Photo 8), 1 pumpkin accession (L9, Photo 9), 1 eggplant accession (L10, Photo 10), 1 winter melon accession (L11, Photo 11), 1 ricebean accession (L12, Photo 12), 1 upland rice accession (L13, Photo 13), and 1 mustard accession (L14,

Table 2. Number of collected genetic resources

Spices		acc.
A1	<i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	3
A2	<i>Eleusine esculenta</i>	8
A3	<i>Oryza sativa</i>	21
A4	<i>Setaria italica</i>	3
A5	<i>Sorghum bicolor</i>	8
A6	<i>Zea mays</i>	20
Cereal crop subtotal		63
B1	<i>Abelmoschus esculentus</i>	1
B2	<i>Arachis hypogaea</i>	2
B3	<i>Benincasa hispida</i>	2
B4	<i>Brassica juncea</i>	2
B5	<i>Cajanus cajan</i>	2
B6	<i>Capsicum annuum</i>	3
B7	<i>Citrullus lanatus</i>	2
B8	<i>Cucumis sativus</i>	17
B9	<i>Cucurbita moschata</i>	13
B10	<i>Lablab purpureus</i>	5
B11	<i>Luffa cylindrica</i>	4
B12	<i>Mucuna pruriens</i>	1
B13	<i>Pachyrhizus erosus</i>	3
B14	<i>Psophocarpus tetragonolobus</i>	2
B15	<i>Sesamum indicum</i>	1
B16	<i>Solanum melongena</i>	3
B17	<i>Vigna radiata</i>	3
B18	<i>Vigna umbellata</i>	2
B19	<i>Vigna unguiculata</i>	29
B20	<i>Vigna unguiculata</i> var. <i>sesquipedalis</i>	4
vegetable and others subtotal		101
Grand total		164

Photo 14).

Next, we visited the Ta Liang tribe in Dak Sa Mo Village, where 3 villagers provided 8 accessions (Collection numbers L15-L22; Photos 15-22). There were 2 finger millet accessions (L15 and L16, Photos 15 and 16), 2 maize accessions (L17 and L18, Photos 17 and 18), 1 cowpea accession (L19, Photo 19), and 3 upland rice accessions (L20-22, Photos 20-22).

Next, we visited the Ta Liang tribe in Dak Pa Du Mai Village, where 6 villagers provided 21 accessions (Collection numbers L23-L43; Photos 23-43) from the mountainous area. There were 1 finger millet accession (L23, Photo 23), 3 sorghum accessions (L24-26, Photos 24-26), 1 foxtail millet accession (L27, Photo 27), 3 maize accessions (L28-30, Photos 28-30), 3 cowpea accessions (L31-33, Photos 31-33), 1 lablab bean accession (L34, Photo 34), 4 upland rice accessions (L35-37 and L43, Photos 35-37 and 43), 1 sesame accession (L38, Photo 38), 1 pumpkin accession (L39, Photo 39), 1 cucumber (L40, Photo 40), 1 winter melon (L41, Photo 41), and 1 luffa accession (L42, Photo 42).

Day 3: February 13, 2020

Site: Sarnxay District, Attapeu Province

Weather: Sunny

Collection number: 44-80

We visited the Ta Liang tribe in Mai Tha Vone Village, where 7 villagers provided 16 accessions (Collection numbers L44-L59; Photos 44-59) from the mountainous area. There were 1 finger millet accession (L44, Photo 44), 2 maize accessions (L45 and L46, Photos 45 and 46), 1 cowpea accession (L47, Photo 47), 1 lablab bean accession (L48, Photo 48), 1 yam bean accession (L49, Photo 49), 7 upland rice accessions (L50-56, Photos L50-56), 1 chili accession (L57, Photo 57), 1 pumpkin accession (L58, Photo 58), and 1 cucumber accession (L59, Photo 59).

Next, we visited the Ta Liang tribe in Dak La Village, where 1 villager provided 9 accessions (Collection numbers L60-L68; Photos 60-68) from the mountainous area. There were 2 finger millet accessions (L60 and L61, Photos 60 and 61), 1 sorghum accession (L62, Photo 62), 1 maize accession (L63, Photo 63), 1 cowpea accession (L64, Photo 64), 1 cucumber accession (L65, Photo 65), 1 job's tears accession (L66, Photo 66), 1 pumpkin accession (L67, Photo 67), and 1 mustard accession (L68, Photo 68).

Next, we visited the Ta Liang tribe in Nam Gon Nuan Village, where 8 villagers provided 12 accessions (Collection numbers L69-L80; Photos 69-80) from the mountainous area. There were 1 sorghum accession (L69, Photo 69), 1 cowpea accession (L70, Photo 70), 2 maize accessions (L71 and L74, Photos 71 and 74), 1 job's tears accession (L72, Photo 72), 1 finger millet accession (L73, Photo 73), 2 cowpea accessions (L75 and L76, Photos 75 and 76), 1 yardlong bean accession (L77, Photo 77), 1 cucumber accession (L78, Photo 78), 1 pumpkin accession (L79, Photo 79), and 1 lablab bean accession (L80, Photo 80).

Day 4: February 14, 2020

Site: Sarnxay District, Attapeu Province

Weather: Sunny

Collection number: 81-94

We visited the Yea tribe in Nong Kai Aok Village, where 4 villagers provided 10 accessions (Collection numbers L81-L90; Photos 81-90) from the mountainous area. There were 1 sorghum accession (L81, Photo 81), 1 maize accession (L82, Photo 82), 1 cucumber accession (L83, Photo 83), 1 cowpea accession (L84, Photo 84), 1 pumpkin accession (L85, Photo 85), 1 foxtail millet accession (L86, Photo 86), 1 yam bean accession (L87, Photo 87), and 3 upland rice accessions (L88-90, Photos

88-90).

Next, we visited the Yea tribe in Vang Taf Noy Village, where 1 villager provided 4 accessions (Collection numbers L91-L94; Photos 91-94) from the mountainous area. There were 1 foxtail millet accession (L91, Photo 91), 1 job's tears accession (L92, Photo 92), 1 cowpea accession (L93, Photo 93), and 1 maize accession (L94, Photo 94).

Day 5: February 15, 2020

Site: Sarnxay District, Attapeu Province

Weather: Sunny

Collection number: 95-100

We visited the Yea tribe in Nong Far Mai Village, where 1 villager provided 6 accessions (Collection numbers L95 - L100; Photos 95 - 100) from the mountainous area. There were 1 cucumber accession (L95, Photo 95), 1 maize accession (L96, Photo 96), 1 cowpea accession (L97, Photo 97), and 3 upland rice accessions (L98-100, Photos 98-100).

Day 6: February 16, 2020

Site: Sukumma District, Champasak Province

Weather: Sunny

Collection number: 101-120

We visited the Lao tribe in Hong Hair Village, where 1 villager provided 9 accessions (Collection numbers L101 - L109; Photos 101 - 109) from the flat area. There were 2 cowpea accessions (L101 and L102, Photos 101 and 102), 1 velvet bean accession (L103, Photo 103), 1 lablab bean accession (L104, Photo 104), 1 peanut accession (L105, Photo 105), 1 pigeon pea accession (L106, Photo 106), and 3 mung bean accessions (L107-109, Photos 107-109).

Next, we met the Suay and Lao tribes in Lat Village, where 2 villagers provided 6 accessions (Collection numbers L110-L115; Photos 110-115) from the flat area. There were 3 yardlong bean accessions (L110, L111, and L113, Photos 110, 111, and 113), 1 cowpea accession (L112, Photo 112), 1 watermelon accession (L114, Photo 114), and 1 cucumber accession (L115, Photo 115).

Next, we moved to the Suay tribe in Phone Village, where 2 villagers provided 5 accessions (Collection numbers L116 - L120; Photos 116 - 120) from the flat area. There were 5 cowpea accessions (L116 - 120, Photos 116-120).

Day 7: February 17, 2020

Site: Sukumma District, Champasak Province

Weather: Sunny

Collection number: 121-128

We visited the Lao tribe in Nondeng Village, where 1 villager provided 1 accession (collection number: L121; Photo 121) from the flat area. It was a cowpea accession (L121, Photo 121).

Next, we visited the Lao tribe in Kokkong Village, where 4 villagers provided 7 accessions (Collection numbers L122 - L128; Photos 122 - 128) from the flat area. There were 3 cowpea accessions (L122 - 124, Photos 122-124), 1 winged bean accession (L125, Photo 125), 1 pumpkin accession (L126, Photo 126), and 2 cucumber accessions (L127 and L128, Photos 127 and 128).

Day 8: February 18, 2020

Site: Mounlapamok District, Champasak Province

Weather: Sunny

Collection number: 129-142

We visited the Khmer tribe in Houay Xai Village, where 1 villager provided 14 accessions (Collection numbers L129 - L142; Photos 129 - 142) from the flat area. There were 2 cowpea accessions (L129 and L142, Photos 129 and 142), 1 ricebean accession (L130, Photo 130), 2 pumpkin accessions (L131 and L133, Photos 131 and 133), 2 cucumber accessions (L132 and L134, Photos 132 and 134), 1 watermelon accession (L135, Photo 135), 1 eggplant accession (L136, Photo 136), 2 luffa accessions (L137 and L138, Photos 137 and 138), and 3 maize accessions (L139-141, Photos 139-141).

Day 9: February 19, 2020

Site: Kong District, Champasak Province

Weather: Sunny

Collection number: 143-156

We visited the Lao tribe in Na Nong Hiay Village, where 9 villagers provided 14 accessions (Collection numbers L143 - L156; Photos 143 - 156) from the flat area. There were 1 cowpea accession (L143, Photo 143), 1 lablab bean accession (L144, Photo 144), 1 winged bean accession (L145, Photo 145), 1 yam bean accession (L146, Photo 146), 3 pumpkin accessions (L147, L149, and L150, Photos 147, 149, and 150), 1 pigeon pea accession (L148, Photo 148), 1 okra accession (L151, Photo 151), 1 eggplant accession (L152, Photo 152), 1 chili accession (L153, Photo 153), 2 cucumber accessions (L154 and L155, Photos 154 and 155), and 1 luffa accession (L156, Photo 156).

Day 10: February 20, 2020

Site: Kong District, Champasak Province

Weather: Sunny

Collection number: 157-164

We visited the Lao tribe in Xot Village, where 2 villagers provided 6 accessions (Collection numbers L157-L162; Photos 157-162) from the flat area. There were 2 maize accessions (L157 and L158, Photos 157 and 158), 1 cowpea accession (L159, Photo 159), 1 chili accession (L160, Photo 160), and 2 cucumber accessions (L161 and 162, Photos 161 and 162).

Next, we visited a different Lao tribe in Napa Kiap Village, where 2 villagers provided 2 accessions (Collection numbers L163 and L164; Photos 163 and 164) from the flat area. There were 1 cucumber accession (L163, Photo 163) and 1 pumpkin accession (L164, Photo 164).

Day 11: February 21, 2020

Site: Pakse City Champasak Province, to Pakxan City, Bolikhamsay Province

Weather: Sunny

The survey team moved toward Vientiane (capital) and stayed in Pakxan City on the way.

Day 12: February 22, 2020

Site: Pakxan City, Bolikhamsay Province, to Vientiane (capital)

Weather: Sunny

We moved to Vientiane (capital).

### Local names of crops according to the tribe

In the present survey, 164 accessions of plant genetic resources were collected, including 63 cereal crops (38 %) and 101 vegetable crops and other crops (62 %) (Table 2).

#### A. Cereal crops

##### A1. *Coix lacryma-jobi* var. *ma-yuen* (job's tears)

The Yea tribe in 3 villages in Attapeu Province provided 3 accessions, of which 1 accession was from Dak La Village (elevation 1,095 m), 1 accession was from Nam Gon Nuan Village (elevation 864 m), and 1 accession was from Vang Taf Noy Village (elevation 870 m). They were known as “Bo” or “Mak Duay.”

##### A2. *Eleusine esculenta* (finger millet)

During this survey, 8 finger millet accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Ta Nian.”

Members of the Ta Liang tribe in 5 villages, including Dak Sa Mo Village (elevation 1,090 m), Dak Pa Du Mai Village (elevation 1,110 m), Dak La Village

(elevation 1,095 m), Nam Gon Nuan Village (elevation 864 m), and Mai Tha Vone Village (elevation 1,023 m), in Attapeu Province provided 7 accessions. They were known as “Ta Nia,” “Pa Yai,” or “Khao Ta Nian.”

##### A3. *Oryza sativa* (upland rice)

A total of 21 upland rice accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Khao Ma Num,” “Khao Jao,” or “Jao Hom.”

Members of the Ta Liang tribe in 3 villages in Attapeu Province provided 14 accessions, of which 3 accessions were from Dak Sa Mo Village (elevation 1,090 m), 4 accessions were from Dak Pa Du Mai Village (elevation 1,110 m), and 7 accessions were from Mai Tha Vone Village (elevation 1,023 m). There were 25 different local names for these accessions, such as “Khao Hai Ba Tum Ba,” “Khao Hi Niao,” “Khao Jao Hai,” “Ban Sun Ba Duk,” “Khao Jao Kao,” “Ba Bru Khao Jao Deng,” “Khao Niao Gam,” “Khao Hai,” “Khao Niao Hai,” “Khao,” “Khao Jao Hai Tam Nid,” “Med Deng,” “Khao Hai Jao Khao,” “Ba Hin Dam,” “Khao Jao Hai,” “Ba Ka Ly,” “Jai Hai,” “Ba Hung Le,” “Ba Trang,” “Khao Hai Niao,” “Ba Na Moek,” “Khao Hai Niao Dam,” “Ba Ja Kan,” “Ba Da Liang,” and “Khao Jao Deng.”

The Yea tribe in 2 villages in Attapeu Province provided 6 accessions, of which 3 accessions were from Nong Kai Aok Village (elevation 1,203 m) and 3 accessions were from Nong Far Mai Village (elevation 300 m). There were different local names for all of the 6 accessions, such as “Khao Niao Gam Hai,” “Khao Niao Khao,” “Khao Jao Hai Khao,” “Khao Jao,” “Khao Niao,” and “Khao Jao Gam.”

##### A4. *Setaria italica* (foxtail millet)

During this survey, 3 foxtail millet accessions were collected.

A member of the Ta Liang tribe in Dak Pa Du Mai Village (elevation 1,110 m) in Attapeu Province provided 1 accession, which was known as “Bao.”

The Yea tribe in 2 villages in Attapeu Province provided 2 accessions, of which 1 accession was from Nong Kai Aok Village (elevation 1,203 m) and 1 accession was from Vang Taf Noy Village (elevation 870 m). They were known as “Brao” or “Prao.”

##### A5. *Sorghum bicolor* (sorghum)

During this survey, 8 sorghum accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 2 accessions, which were

both known as “Lang Koi Bok.”

Members of the Ta Liang tribe in 3 villages, including Dak Pa Du Mai Village (elevation 1,110 m), Dak La Village (elevation 1,095 m), and Nam Gon Nuan Village (elevation 864 m), in Attapeu Province provided 5 accessions, which were known as “Bo Vum,” “Jao Fang,” “Ba Lum,” “Khao Fang,” “Ba Lum,” “Nam Plum,” “Khao Fang Lom,” or “Mak Plong Mang.”

The Yea tribe in Nong Kai Aok Village (elevation 1,203 m) in Attapeu Province provided 1 accession, which was known as “Ba Yui” or “Kha Fang.”

#### A6. *Zea mays* (maize)

A total of 20 maize accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 2 accessions, which were known as “Sa Ta Bo Gam,” “Saly Dam,” “Tam Bo Ja Lak,” or “Sa Pon.”

Members of the Ta Liang tribe in 3 villages in Attapeu Province provided 10 accessions, of which 2 accessions were from Dak Sa Mo Village (elevation 1,090 m), 3 accessions were from Dak Pa Du Mai Village (elevation 1,110 m), 2 accessions were from Mai Tha Vone Village (elevation 1,023 m), 1 accession was from Dak La Village (elevation 1,095 m), and 2 accessions were from Nam Gon Nuan Village (elevation 864 m). They were known as “A Bo,” “Saly,” “Jaly,” “Lok,” “Saly Dam,” or “Saly Kam.”

The Yea tribe in 3 villages in Attapeu Province provided 3 accessions, of which 1 accession was from Nong Kai Aok Village (elevation 1,203 m), 1 accession was from Vang Taf Noy Village (elevation 870 m), and 1 accession was from Nong Far Mai Village (elevation 300 m). All of them were known as “Saly.”

The Khmer tribe in Houay Xai Village (elevation 113 m) in Champasak Province provided 3 accessions. All of them were known as “Saly.”

The Lao tribe in Xot Village (elevation 77 m) in Champasak Province provided 2 accessions, which were known as “Saly.”

#### B. Vegetable crops

##### B1. *Abelmoschus esculentus* (okra)

During the survey, 1 okra accession was collected. The Lao tribe in Na Nong Hiay Village (elevation 99 m) in Champasak Province provided this accession, which was known as “Mak O Win Tin.”

##### B2. *Arachis hypogaea* (peanut)

During this survey, 2 peanut accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Bu Bai Pai Koed” or “Thua Din Sam Duan.”

The Lao tribe in Hong Hair Village (elevation 88 m) in Champasak Province provided 1 accession, which was known as “Thua Din.”

##### B3. *Benincasa hispida* (winter melon)

During this survey, 2 winter melon accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Mak Ka Duk” or “Mak Fak.”

The Ta Liang tribe in Dak Pa Du Mai Village (elevation 1,110 m) in Attapeu Province provided 1 accession, which was known as “Mak Fak” or “Yan.”

##### B4. *Brassica juncea* (mustard)

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Phak Kad Hai” or “Sa Bi Kuk.”

The Ta Liang tribe in Dak La Village (elevation 1,095 m) in Attapeu Province provided 1 accession, which was known as “Ka Long Bu Bi Mia Hu” or “Phak Kad Khied Hai.”

##### B5. *Cajanus cajan* (pigeon pea)

During this survey, 2 pigeon pea accessions were collected.

The Lao tribe in Xot Village (elevation 77 m) and Na Nong Hiay Village (elevation 99 m) in Champasak Province provided 1 accession each. Both accessions were known as “Thua Hair.”

##### B6. *Capsicum annuum* (chili)

During this survey, 3 chili accessions were collected.

The Ta Liang tribe in Mai Tha Vone Village (elevation 1,023 m) in Attapeu Province provided 1 accession, which was known as “Brek” or “Mak Phet.”

The Lao tribe in Na Nong Hiay Village (elevation 99 m) and Xot Village (elevation 77 m) in Champasak Province provided 1 accession each. Both accessions were known as “Mak Phet.”

##### B7. *Citrullus lanatus* (watermelon)

During this survey, 2 watermelon accessions were collected.

The Suay tribe in Lat Village (elevation 96 m) in Champasak Province provided 1 accession, which was known as “Mak Mo Khieo.”

The Khmer tribe in Houay Xai Village (elevation

113 m) in Champasak Province provided 1 accession, which was known as “Mak Mo.”

#### B8. *Cucumis sativus* (cucumber)

During this survey, 17 cucumber accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Mk Teg” or “Ta Pung.”

The Ta Liang tribe in 4 villages in Attapeu Province provided 4 accessions, of which 1 accession was from Dak Pa Du Mai Village (elevation 1,110 m), 1 accession was from Mai Tha Vone Village (elevation 1,023 m), and 1 accession was from Dak La Village (elevation 1,095 m). There were 7 different local names for these accessions, such as “Mak Teng Hai,” “Mak Teng Khang,” “Plea Pong,” “Mak Teng,” and “Pong.”

The Yea tribe in 2 villages in Attapeu Province provided 2 accessions, of which 1 accession was from Nong Kai Aok Village (elevation 1,203 m) and 1 accession was from Nong Far Mai Village (elevation 300 m). They were known as “Mak Noi” or “Mak Teng.”

The Suay tribe in Lat Village (elevation 96 m) in Champasak Province provided 1 accession, which was known as “Mak Teng.”

The Khmer tribe in Houay Xai Village (elevation 113 m) in Champasak Province provided 2 accessions, which were known as “Mak Teng Lay.”

The Lao tribe in 4 villages in Champasak Province provided 7 accessions, of which 2 accessions were from Kokkong Village (elevation 134 m), 2 accessions were from Na Nong Hiay Village (elevation 99 m), 2 accessions were from Xot Village (elevation 77 m), and 1 accession was from Napa Kiap Village (elevation 73 m).

There were 6 different local names for these accessions, such as “Mak Teng Ching,” “Noua Noi,” “Teng Yai,” “Mak Teng Kua,” “Mak Teng,” and “Mak Teng Xang.”

#### B9. *Cucurbita moschata* (pumpkin)

During this survey, 13 pumpkin accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Mak Eu” or “Mak Mu.”

The Ta Liang tribe in 4 villages in Attapeu Province provided 4 accessions, of which 1 accession was from Dak Pa Du Mai Village (elevation 1,110 m), 1 accession was from Mai Tha Vone Village (elevation 1,023 m), 1 accession was from Dak La Village (elevation 1,095

m), and 1 accession was from Nam Gon Nuan Village (elevation 864 m). They were known as “Mak Eu” or “Pa Eu.”

The Yea tribe in Nong Kai Aok Village (elevation 1,203 m) in Attapeu Province provided 1 accession, which was known as “Mak Eu” or “Mak Neu.”

The Khmer tribe in Houay Xai Village (elevation 113 m) in Champasak Province provided 2 accessions, which were known as “Mak Eu,” “Muay Yao,” or “Muay Mon.”

The Lao tribe in 3 villages in Champasak Province provided 5 accessions, of which 1 accession was from Kokkong Village (elevation 134 m), 3 accessions were from Na Nong Hiay Village (elevation 99 m), and 1 accession was from Napa Kiap Village (elevation 73 m). All of them were known as “Mak Eu.”

#### B10. *Lablab purpureus* (lablab bean)

During this survey, 5 lablab bean accessions were collected.

The Ta Liang tribe in 3 villages in Attapeu Province provided 3 accessions, of which 1 accession was from Dak Pa Du Mai Village (elevation 1,110 m), 1 accession was from Mai Tha Vone Village (elevation 1,023 m), and 1 accession was from Nam Gon Nuan Village (elevation 864 m). They were known as “Pre Lam,” “Thua Peb,” “Pea Nan,” “Ham,” or “Thua Beab.”

The Lao tribe in Hong Hair Village (elevation 88 m) and Na Nong Hiay Village (elevation 99 m) in Champasak Province provided 2 accessions, which were known as “Thua Peab.”

#### B11. *Luffa cylindrica* (luffa)

During this survey, 4 luffa accessions were collected.

The Ta Liang tribe in Dak Pa Du Mai Village (elevation 1,110 m) in Attapeu Province provided 1 accession, which was known as “Mak Buab” or “Ka Nong Pea Tho.”

The Khmer tribe in Houay Xai Village (elevation 113 m) in Champasak Province provided 2 accessions, which were known as “Mak Buab Son” or “Mak Buab Yao.”

The Lao tribe in Na Nong Hiay Village (elevation 99 m) in Champasak Province provided 1 accession, which was known as “Mak Buab.”

#### B12. *Mucuna pruriens* (velvet bean)

During this survey, 1 velvet bean accession was collected.

The Lao tribe in Hong Hair Village (elevation 88 m)



in Champasak Province provided this accession, which was known as “Thua Kho.”

B13. *Pachyrhizus erosus* (yam bean)

During this survey, 3 yam bean accessions were collected.

The Ta Liang tribe in Mai Tha Vone Village (elevation 1,023 m) in Attapeu Province provided 1 accession, which was known as “Man Phao” or “Buam Lun.”

The Yea tribe in Nong Kai Aok Village (elevation 1,203 m) in Attapeu Province provided 1 accession, which was known as “Man Pao” or “Pa Hon.”

The Lao tribe in Na Nong Hiay Village (elevation 99 m) in Champasak Province provided 1 accession, which was known as “Met Mon Phao.”

B14. *Psophocarpus tetragonolobus* (winged bean)

During this survey, 2 winged bean accessions were collected.

The Lao tribe in 2 villages in Champasak Province provided 2 accessions, of which 1 accession was from Kokkong Village (elevation 134 m) and 1 accession was from Na Nong Hiay Village (elevation 99 m). Both accessions were known as “Thua Phu.”

B15. *Sesamum indicum* (sesame)

During this survey, 1 sesame accession was collected.

The Ta Liang tribe in Dak Pa Du Mai Village (elevation 1,110 m) in Attapeu Province provided this accession, which was known as “Mak Gaa.”

B16. *Solanum melongena* (eggplant)

During this survey, 3 eggplant accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Lum” or “Mak Kheu.”

The Khmer tribe in Houay Xai Village (elevation 113 m) in Champasak Province provided 1 accession, which was known as “Mak Khua.”

The Lao tribe in Na Nong Hiay Village (elevation 99 m) in Champasak Province provided 1 accession, which was known as “Mak Khua Por” or “Sii Khieo.”

B17. *Vigna radiata* (mung bean)

During this survey, 3 mung bean accessions were collected.

The Lao tribe in Hong Hair Village (elevation 88 m) in Champasak Province provided 3 accessions, which

were known as “Thua Khieo,” “Fak Khao,” or “Fak Dam.”

B18. *Vigna umbellata* (ricebean)

During this survey, 2 ricebean accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Thua Lan Tek.”

The Khmer tribe in Houay Xai Village (elevation 113 m) in Champasak Province provided 1 accession, which was known as “Thua Dam.”

B19. *Vigna unguiculata* (cowpea)

During this survey, 29 cowpea accessions were collected.

The Alak tribe in Dak Sum Village (elevation 915 m) in Attapeu Province provided 1 accession, which was known as “Tak Dik” or “Thua Pi.”

The Ta Liang tribe in 5 villages in Attapeu Province provided 9 accessions, of which 3 accessions were from Dak Sa Mo Village (1090 m), 1 accession was from Dak Pa Du Mai Village (elevation 1,110 m), 1 accession was from Mai Tha Vone Village (elevation 1,023 m), 1 accession was from Dak La Village (elevation 1,095 m), and 3 accessions were from Nam Gon Nuan Village (elevation 864 m). There were 9 different local names for these accessions, such as “Thua,” “Led Tu,” “Thua Kheng,” “Thua Sin,” “Mouk Bok,” “Thua Khao,” “Tuk,” “Mak Thua Khao,” and “Thua Dam.”

The Yea tribe in 2 villages in Attapeu Province provided 3 accessions, of which 1 accession was from Nong Kai Aok Village (elevation 1,203 m), 1 accession was from Vang Taf Noy Village (elevation 870 m) and 1 accession was from Nong Far Mai Village (elevation 300 m). They were known as “Thua (Pai Pla),” “Sii Dam,” “Mak Thua Khao” or “Pai Tor (Thua).”

The Suay tribe in 2 villages in Champasak Province provided 6 accessions, of which 1 accession was from Lat Village (elevation 96 m) and 5 accessions were from Phone Village (elevation 91 m). There were 9 different local names for these accessions, such as “Thua Phum,” “Met Deng,” “Thua Suan,” “Met Dam Noi,” “Thua Lian,” “Thua Na Son,” “Thua Na Yao,” “Thua Far Khua,” and “Fak Lay.”

The Khmer tribe in Houay Xai Village (elevation 113 m) in Champasak Province provided 2 accessions, which were known as “Thua Pii.”

The Lao tribe in 5 villages in Champasak Province provided 8 accessions, of which 2 accessions were from Hong Hair Village (elevation 88 m), 1 accession was

from Nondeng Village (elevation 114 m), 3 accessions were from Kokkong Village (elevation 134 m), 1 accession was from Na Nong Hiay Village (elevation 99 m), and 1 accession was from Xot Village (elevation 77 m). There were 7 different local names for these accessions, such as “Thua Phum,” “Met Deng,” “Thua Pii,” “Thua Dor,” “Met Lay,” “Thua,” and “Met Dam.”

B20. *Vigna unguiculata* var. *sesquipedalis* (yardlong bean)

During this survey, 4 yardlong bean accessions were collected.

The Ta Liang tribe in Nam Gon Nuan Village (elevation 864 m) in Attapeu Province provided 1 accession, which was known as “Thua Fak Yao.”

The Suay tribe in Lat Village (elevation 96 m) in Champasak Province provided 3 accessions. There were 5 different local names for these accessions, such as “Thua Kra,” “Met Dam,” “Teng,” “Thua Phum,” or “Met Deng.”

### Conclusion

Based on our experience, sorghum and other cereal crop landraces may still be found in villages in Attapeu Province, especially at the border with Cambodia and Vietnam. The biggest challenge of the survey is that villages with possible unexplored local crop landraces are far from towns, and roads accessible by cars are in poor conditions (Okuizumi *et al.* 2013, 2015a, 2020). We believe that we could obtain more unique plant genetic resources by conducting the survey in the dry season with good road conditions and visiting inaccessible villages.

The genetic resources collected during this survey will be subjected to further characterization and evaluation at the Cambodian Agricultural Research and Development Institute (CARDI) and Genetic Resources Center, NARO.

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# ラオスにおける植物遺伝資源の探索・収集，2020年2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、2020年2月11日から22日にかけて行われたラオス南部（アタプー県およびチャンパサック県）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、ベトナム国境、タイ国境、カンボジア国境に近い村で、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9点をはじめとする穀物63点、ササゲ属3種の4作物38点をはじめとする野菜等101点、合計164点の植物遺伝資源を収集し、ラオスジーンバンクに保存した。

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 (H: plant height, D: diameter, L: length)	Photo No.
1	2020-02-L1	275256	Feb. 12	<i>Sorghum bicolor</i>	sorghum	Seed	Lang Koi Bok	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	H 2-2.5 m, panicle L 30 cm, Mr. Bod, Alak tribe	Photo 1
2	2020-02-L2	275289	Feb. 12	<i>Sorghum bicolor</i>	sorghum	Seed	Lang Koi Gam	Landrace	Attapeu, Sarnxay, Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	H 2-3 m, panicle L 25 cm, Mr. Kham Pa, Alak tribe	Photo 2
3	2020-02-L3	275290	Feb. 12	<i>Eleusine esculenta</i>	finger millet	Seed	Ta Nian	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	H 1-1.2 m, panicle L 6 cm, Mrs. Vong, Alak tribe	Photo 3
4	2020-02-L4	275292	Feb. 12	<i>Zea mays</i>	maize	Seed	Sa Ta Bo Gam (Saly Dam)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	H 2-2.5 m, ear H 1-1.3 m, ear L 18 cm, Mr. Boun Tan, Alak tribe	Photo 4
5	2020-02-L5	275293	Feb. 12	<i>Zea mays</i>	maize	Seed	Tam Bo Ja Lak (Sa Pon)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	H 2-2.5 m, ear H 1-1.3 m, ear L 16 cm, Mr. Kham Pa, Alak tribe	Photo 5
6	2020-02-L6	275294	Feb. 12	<i>Arachis hypogaea</i>	peanut	Seed	Bu Bai Pai Koed (Thua Din Sam Duan)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	H 30 cm, pod L 3.5-4 cm, Mrs. Vung, Alak tribe	Photo 6
7	2020-02-L7	275296	Feb. 12	<i>Vigna unguiculata</i>	cowpea	Seed	Tak Dik (Thua Pi)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	plant L 3-4 m, pod L 18-23 cm, Mrs. Vung, Alak tribe	Photo 7
8	2020-02-L8	275297	Feb. 12	<i>Cucumis sativus</i>	cucumber	Seed	Mk Teg (Ta Pung)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	plant L 3-4 m, fruit L 18-20 cm, Mrs. Lek, Alak tribe	Photo 8
9	2020-02-L9	275298	Feb. 12	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu (Mu)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	plant L 7-8 m, fruit D 16c m, Mrs. Vong, Alak tribe	Photo 9
10	2020-02-L10	275299	Feb. 12	<i>Solanum melongena</i>	eggplant	Seed	Lum (Mak Kheu)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Plain level-Level-Moderate	H 60-80 cm, fruit L 5 cm, Mr. Than, Alak tribe	Photo 10
11	2020-02-L11	275300	Feb. 12	<i>Benincasa hispida</i>	winter melon	Seed	Mak Ka Duk (Mak Fak)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	plant L 5-6 m, fruit L 19 cm, Mrs. Then, Alak tribe	Photo 11
12	2020-02-L12	275301	Feb. 12	<i>Vigna umbellata</i>	ricebean	Seed	Thua Lan Tek	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	plant L 1-2 m, pod L 10 cm, Mrs. Sea, Alak tribe	Photo 12
13	2020-02-L13	275302	Feb. 12	<i>Oryza sativa</i>	upland rice	Seed	Khao Ma Num (Khao Jao, Jao Hom)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	H 1.2-1.5 m, panicle L 17-20 cm, Mr. Than, Alak tribe	Photo 13
14	2020-02-L14	275303	Feb. 12	<i>Brassica juncea</i>	mustard	Seed	Phak Kad Hai (Sa Bi Kuk)	Landrace	Attapeu, Sarnxay, Dak Sum	N15-12-41.9	E107-06-12.0	915	Mountainous-Slope-Good	H 1.2 m, pod L 1.3 cm, Mr. Kham Kong, Alak tribe	Photo 14
15	2020-02-L15	275304	Feb. 12	<i>Eleusine esculenta</i>	finger millet	Seed	Ta Nia	Landrace	Attapeu, Sarnxay, Dak Sa Mo	N15-14-43.2	E107-04-37.6	1,090	Mountainous-Slope-Good	H 1 m, panicle L 6 cm, Mr. Air Kham, Ta Liang tribe	Photo 15
16	2020-02-L16	275305	Feb. 12	<i>Eleusine esculenta</i>	finger millet	Seed	Ta Nia	Landrace	Attapeu, Sarnxay, Dak Sa Mo	N15-14-43.2	E107-04-37.6	1,090	Mountainous-Slope-Good	H 1.2 m, panicle L 12 cm, Mr. Air Kham, Ta Liang tribe	Photo 16
17	2020-02-L17	275306	Feb. 12	<i>Zea mays</i>	maize	Seed	A Bo (Saly)	Landrace	Attapeu, Sarnxay, Dak Sa Mo	N15-14-43.2	E107-04-37.6	1,090	Mountainous-Slope-Good	H 2 m, ear H 1.2 m, ear L 19 cm, Mr. Air Kham, Ta Liang tribe	Photo 17
18	2020-02-L18	275307	Feb. 12	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Attapeu, Sarnxay, Dak Sa Mo	N15-14-43.2	E107-04-37.6	1,090	Mountainous-Slope-Good	H 2 m, ear H 1.2 m, ear L 15 cm, Mr. Air Kham, Ta Liang tribe	Photo 18
19	2020-02-L19	275308	Feb. 12	<i>Vigna unguiculata</i>	cowpea	Seed	Thua	Landrace	Attapeu, Sarnxay, Dak Sa Mo	N15-14-43.2	E107-04-37.6	1,090	Mountainous-Slope-Good	plant L 3-4 m, pod L 3-4 m, Mr. Niam, Ta Liang tribe	Photo 19
20	2020-02-L20	275309	Feb. 12	<i>Oryza sativa</i>	upland rice	Seed	Khao Hai Ba Tum Ba (Khao Hi Niao)	Landrace	Attapeu, Sarnxay, Dak Sa Mo	N15-14-43.2	E107-04-37.6	1,090	Mountainous-Slope-Good	H 1.2-1.5 m, panicle L 30 cm, Mr. Niam, Ta Liang tribe	Photo 20
21	2020-02-L21	275310	Feb. 12	<i>Oryza sativa</i>	upland rice	Seed	Khao Jao Hai (Ban Sun Ba Duk, Khao Jao Kao)	Landrace	Attapeu, Sarnxay, Dak Sa Mo	N15-14-43.2	E107-04-37.6	1,090	Mountainous-Slope-Good	H 1.2 m, panicle L 30 cm, Mr. Niam, Ta Liang tribe	Photo 21

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 (H: plant height, D: diameter, L: length)	Photo No.
22	2020-02-L22	275311	Feb. 12	<i>Oryza sativa</i>	upland rice	Seed	Khao Jao Hai (Ba Bru, Khao Jao Deng)	Landrace	Attapeu, Sarnxay, Dak Sa Mo	N15-14-43.2	E107-04-37.6	1,090	Mountainous-Slope-Good	H 1.2 m, panicle L 30 cm, Mr. Thed, Ta Liang tribe	Photo 22
23	2020-02-L23	275312	Feb. 12	<i>Eleusine esculenta</i>	finger millet	Seed	Pa Yai (Khao Ta Nian)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 1 m, panicle L 8 cm, Mr. Iang Kham, Ta Liang tribe	Photo 23
24	2020-02-L24	275313	Feb. 12	<i>Sorghum bicolor</i>	sorghum	Seed	Bo Vum (Jao Fang)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 2-2.5 m, panicle L 28 cm, Mr. Vong Noy, Ta Liang tribe	Photo 24
25	2020-02-L25	275314	Feb. 12	<i>Sorghum bicolor</i>	sorghum	Seed	Ba Lum (Khao Fang)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 3 m, panicle L 50 cm, Mr. Vong Noy, Ta Liang tribe	Photo 25
26	2020-02-L26	275315	Feb. 12	<i>Sorghum bicolor</i>	sorghum	Seed	Ba Lum	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 2-2.5 m, panicle L 45 cm, Mrs. Phommany, Ta Liang tribe	Photo 26
27	2020-02-L27	275316	Feb. 12	<i>Setaria italica</i>	foxtail millet	Seed	Bao	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 1.5 m, panicle L 27 cm, Mrs. Phommany, Ta Liang tribe	Photo 27
28	2020-02-L28	275317	Feb. 12	<i>Zea mays</i>	maize	Seed	Jaly (Saly)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 2-2.6 m, ear H 1.3-1.5 m, ear L 12cm, Mr. Pheng Chan, Ta Liang tribe	Photo 28
29	2020-02-L29	275318	Feb. 12	<i>Zea mays</i>	maize	Seed	Jaly (Saly)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 2-2.5 m, ear H 1.3-1.5 m, ear L 16 cm, Mr. Pheng Chan, Ta Liang tribe	Photo 29
30	2020-02-L30	275319	Feb. 12	<i>Zea mays</i>	maize	Seed	Jaly	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 2-2.5 m, ear H 1.3-1.5 m, ear L 17cm, Mr. Vong Noy, Ta Liang tribe	Photo 30
31	2020-02-L31	275320	Feb. 12	<i>Vigna unguiculata</i>	cowpea	Seed	Led Tu (Thua Kheng)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	plant L 6-8 m, pod L 22 cm, Mrs. Phommany, Ta Liang tribe	Photo 31
32	2020-02-L32	275321	Feb. 12	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Kheng (Led Tu)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	plant L 6-7 m, pod L 21-23 cm, Mrs. Phommany, Ta Liang tribe	Photo 32
33	2020-02-L33	275322	Feb. 12	<i>Vigna unguiculata</i>	cowpea	Seed	Led Tu (Thua Sin)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	plant L 6-7 m, pod L 21 cm, Mrs. Phommany, Ta Liang tribe	Photo 33
34	2020-02-L34	275323	Feb. 12	<i>Lablab purpureus</i>	lablab bean	Seed	Pre Lam (Thua Peb)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Plain level-Level-Good	plant L 10 m, pod L 9 cm, Mrs. Phommany, Ta Liang tribe	Photo 34
35	2020-02-L35	275324	Feb. 12	<i>Oryza sativa</i>	upland rice	Seed	Khao Niao Gam (Khao Hai)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 1.2-1.5 m, panicle L 25-30 cm, Mrs. Vieng Lai, Ta Liang tribe	Photo 35
36	2020-02-L36	275325	Feb. 12	<i>Oryza sativa</i>	upland rice	Seed	Khao Niao Hai (Khao)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 1.2-1.5 m, panicle L 20-25 cm, Mrs. Vieng Lai, Ta Liang tribe	Photo 36
37	2020-02-L37	275326	Feb. 12	<i>Oryza sativa</i>	upland rice	Seed	Khao Jao Hai Tam Nid (Med Deng)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 1.2-1.5 m, panicle L 20-25 cm, Mrs. Vieng Lai, Ta Liang tribe	Photo 37
38	2020-02-L38	275327	Feb. 12	<i>Sesamum indicum</i>	sesame	Seed	Mak Gaa	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 1.2-1.5 m, pod L 1-2 cm, Mrs. Phommaly, Ta Liang tribe	Photo 38
39	2020-02-L39	275328	Feb. 12	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	plant L 6-7 m, fruit D 16 cm, Mrs. Phommaly, Ta Liang tribe	Photo 39
40	2020-02-L40	275329	Feb. 12	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng Hai (Mak Teng Khang)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	plant L 6-7 m, fruit L 25 cm, Mrs. Phommaly, Ta Liang tribe	Photo 40
41	2020-02-L41	275330	Feb. 12	<i>Benincasa hispida</i>	winter melon	Seed	Mak Fak (Yan)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	plant L 7-8 m, fruit L 31 cm, Mrs. Phommaly, Ta Liang tribe	Photo 41
42	2020-02-L42	275331	Feb. 12	<i>Luffa cylindrica</i>	luffa	Seed	Mak Buab (Ka Nong, Pea Tho)	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	plant L 10-30 m, fruit L 28 cm, Mrs. Phommaly, Ta Liang tribe	Photo 42
43	2020-02-L43	275332	Feb. 12	<i>Oryza sativa</i>	upland rice	Seed	Khao Hai Jao Khao	Landrace	Attapeu, Sarnxay, Dak Pa Du Mai	N15-16-15.0	E107-13-03.5	1,110	Mountainous-Slope-Good	H 1.3-1.5 m, panicle L 20-25 cm, Mrs. Phommaly, Ta Liang tribe	Photo 43

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 (H: plant height, D: diameter, L: length)	Photo No.
44	2020-02-L44	275333	Feb. 13	<i>Eleusine esculenta</i>	finger millet	Seed	Yi Yai (Khao Ta Nian)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 1-1.2 m, panicle L 7 cm, Mr. Xieng Kham, Ta Liang tribe	Photo 44
45	2020-02-L45	275334	Feb. 13	<i>Zea mays</i>	maize	Seed	Saly (Lok)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 2-3 m, ear H 1.5 m, ear L 15 cm, Mrs. Khib, Ta Liang tribe	Photo 45
46	2020-02-L46	275335	Feb. 13	<i>Zea mays</i>	maize	Seed	Saly Dam	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 2-2.5 m, ear H 1.5 m, ear L 17 cm, Mrs. Khib, Ta Liang tribe	Photo 46
47	2020-02-L47	275336	Feb. 13	<i>Vigna unguiculata</i>	cowpea	Seed	Mouk Bok (Thua Khao)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	plant L 7-10 m, pod L 17 cm, Mrs. Khib, Ta Liang tribe	Photo 47
48	2020-02-L48	275337	Feb. 13	<i>Lablab purpureus</i>	lablab bean	Seed	Pea Nan (Thua Peb)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	plant L 7-8 m, pod L 10 cm, Mr. Vihan, Ta Liang tribe	Photo 48
49	2020-02-L49	275338	Feb. 13	<i>Pachyrhizus erosus</i>	yam bean	Seed	Man Phao (Buam Lun)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	plant L 4-5 m, pod L 17 cm, Mrs. Thuk, Ta Liang tribe	Photo 49
50	2020-02-L50	275339	Feb. 13	<i>Oryza sativa</i>	upland rice	Seed	Ba Hin Dam (Khao Jao Hai)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 1.5 m, panicle L 20-25 cm, Mrs. Onsy, Ta Liang tribe	Photo 50
51	2020-02-L51	275340	Feb. 13	<i>Oryza sativa</i>	upland rice	Seed	Ba Ka Ly (Jai Hai)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 1.5 m, panicle L 20-25 cm, Mrs. Onsy, Ta Liang tribe	Photo 51
52	2020-02-L52	275341	Feb. 13	<i>Oryza sativa</i>	upland rice	Seed	Ba Hung Le (Khao Jao Hai)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 80c m, panicle L 25 cm, Mrs. Onsy, Ta Liang tribe	Photo 52
53	2020-02-L53	275342	Feb. 13	<i>Oryza sativa</i>	upland rice	Seed	Ba Trang (Khao Hai Niao)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 80-130 cm, panicle L 25 cm, Mr. Vanphone, Ta Liang tribe	Photo 53
54	2020-02-L54	275343	Feb. 13	<i>Oryza sativa</i>	upland rice	Seed	Ba Na Moek (Khao Hai Niao Dam)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 1.2-1.5 m, panicle L 25 cm, Mr. Phonethavy, Ta Liang tribe	Photo 54
55	2020-02-L55	275344	Feb. 13	<i>Oryza sativa</i>	upland rice	Seed	Ba Ja Kan (Khao Niao Hai)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 1.2-1.5 m, panicle L 20 cm, Mr. Phonethavy, Ta Liang tribe	Photo 55
56	2020-02-L56	275345	Feb. 13	<i>Oryza sativa</i>	upland rice	Seed	Ba Da Liang (Khao Jao Deng)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 1.2-1.5m, panicle L 25cm, Mr. Phonethavy, Ta Liang tribe	Photo 56
57	2020-02-L57	275346	Feb. 13	<i>Capsicum annuum</i>	chili	Seed	Brek (Mak Phet)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	H 1 m, pod L 5-10 cm, Mrs. Khib, Ta Liang tribe	Photo 57
58	2020-02-L58	275347	Feb. 13	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	plant L 5-10 m, Mr. Phonethavy, Ta Liang tribe	Photo 58
59	2020-02-L59	275348	Feb. 13	<i>Cucumis sativus</i>	cucumber	Seed	Plea Pong (Mak Teng)	Landrace	Attapeu, Sarnxay, Mai Tha Vone	N15-14-51.4	E107-13-21.2	1,023	Mountainous-Slope-Good	plant L 7-8 m, Mr. Phonethavy, Ta Liang tribe	Photo 59
60	2020-02-L60	275349	Feb. 13	<i>Eleusine esculenta</i>	finger millet	Seed	Khao Ta Nian	Landrace	Attapeu, Sarnxay, Dak La	N15-13-38.8	E107-10-27.6	1,095	Mountainous-Slope-Good	H 1 m, panicle L 6 cm, Mr. Boun Suang, Ta Liang tribe	Photo 60
61	2020-02-L61	275350	Feb. 13	<i>Eleusine esculenta</i>	finger millet	Seed	Khao Ta Nian	Landrace	Attapeu, Sarnxay, Dak La	N15-13-38.8	E107-10-27.6	1,095	Mountainous-Slope-Good	H 1 m, panicle L 7 cm, Mr. Boun Suang, Ta Liang tribe	Photo 61
62	2020-02-L62	275351	Feb. 13	<i>Sorghum bicolor</i>	sorghum	Seed	Nam Plum (Khao Fang Lom)	Landrace	Attapeu, Sarnxay, Dak La	N15-13-38.8	E107-10-27.6	1,095	Mountainous-Slope-Good	H 2-3 m, panicle L 22 cm, Mr. Boun Suang, Ta Liang tribe	Photo 62
63	2020-02-L63	275352	Feb. 13	<i>Zea mays</i>	maize	Seed	Jaly (Saly)	Landrace	Attapeu, Sarnxay, Dak La	N15-13-38.8	E107-10-27.6	1,095	Mountainous-Slope-Good	H 2.5 m, ear H 1.2-1.5 m, ear L 16cm, Mr. Boun Suang, Ta Liang tribe	Photo 63
64	2020-02-L64	275353	Feb. 13	<i>Vigna unguiculata</i>	cowpea	Seed	Tuk (Mak Thua Khao)	Landrace	Attapeu, Sarnxay, Dak La	N15-13-38.8	E107-10-27.6	1,095	Mountainous-Slope-Good	plant L 8-10 m, pod L 15-19 cm, Mr. Boun Suang, Ta Liang tribe	Photo 64
65	2020-02-L65	275354	Feb. 13	<i>Cucumis sativus</i>	cucumber	Seed	Pong (Mak Teng Hai)	Landrace	Attapeu, Sarnxay, Dak La	N15-13-38.8	E107-10-27.6	1,095	Mountainous-Slope-Good	plant L 5-10 m, fruit L 22 cm, Mr. Boun Suang, Ta Liang tribe	Photo 65

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 (H: plant height, D: diameter, L: length)	Photo No.
66	2020-02-L66	275355	Feb. 13	<i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	job's tears	Seed	Bo (Mak Duay)	Landrace	Attapeu, Sarnxay, Dak La	N15-13-38.8	E107-10-27.6	1,095	Mountainous-Slope-Good	H 1.5 m, panicle L 30 cm, Mr. Boun Suang, Ta Liang tribe	Photo 66
67	2020-02-L67	275356	Feb. 13	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu (Pa Eu)	Landrace	Attapeu, Sarnxay, Dak La	N15-13-38.8	E107-10-27.6	1,095	Mountainous-Slope-Good	plant L 7-10 m, Mr. Boun Suang, Ta Liang tribe	Photo 67
68	2020-02-L68	275357	Feb. 13	<i>Brassica juncea</i>	mustard	Seed	Ka Long Bu Bi Mia Hu (Phak Kad Khied Hai)	Landrace	Attapeu, Sarnxay, Dak La	N15-13-38.8	E107-10-27.6	1,095	Mountainous-Slope-Good	H 1 m, Mr. Boun Suang, Ta Liang tribe	Photo 68
69	2020-02-L69	275358	Feb. 13	<i>Sorghum bicolor</i>	sorghum	Seed	Mak Plong Mang (Khao Fang Lom)	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Mountainous-Slope-Good	H 1.5-2 m, panicle L 19 cm, Mrs. Phan, Ta Liang tribe	Photo 69
70	2020-02-L70	275359	Feb. 13	<i>Vigna unguiculata</i>	cowpea	Seed	Mak Thua Khao	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Mountainous-Slope-Good	plant L 3-5 m, pod L 22 cm, Mrs. Phan, Ta Liang tribe	Photo 70
71	2020-02-L71	275360	Feb. 13	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Mountainous-Slope-Good	H 1.6-2 m, ear H 1 m, ear L 14-16 cm, Mrs. Phan, Ta Liang tribe	Photo 71
72	2020-02-L72	275361	Feb. 13	<i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	job's tears	Seed	Mak Duay (Bo)	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Mountainous-Slope-Good	H 1.6 m, panicle L 25 cm, Mrs. Thak, Ta Liang tribe	Photo 72
73	2020-02-L73	275362	Feb. 13	<i>Eleusine esculenta</i>	finger millet	Seed	Khao Niam	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Mountainous-Slope-Good	H 0.8-1 m, panicle L 7 cm, Mrs. Thak, Ta Liang tribe	Photo 73
74	2020-02-L74	275363	Feb. 13	<i>Zea mays</i>	maize	Seed	Saly Kam	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Mountainous-Slope-Good	H 2 m, ear H 1.2 m, ear L 18 cm, Mrs. Yien, Ta Liang tribe	Photo 74
75	2020-02-L75	275364	Feb. 13	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Dam	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Mountainous-Slope-Good	plant L 5-6 m, pod L 17 cm, Mrs. Chanthala, Ta Nian tribe	Photo 75
76	2020-02-L76	275365	Feb. 13	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Khao	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Mountainous-Slope-Good	plant L 10 m, pod L 22-24 cm, Mrs. Chanthala, Ta Liang tribe	Photo 76
77	2020-02-L77	275366	Feb. 13	<i>Vigna unguiculata</i> var. <i>sesquipedalis</i>	yardlong bean	Seed	Thua Fak Yao	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Plain level-Level-Good	plant L 3-5 m, pod L 39 cm, Mrs. Phieng, Ta Liang tribe	Photo 77
78	2020-02-L78	275367	Feb. 13	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng Hai	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Plain level-Level-Good	plant L 5-10 m, fruit L 21 cm, Mrs. Sanya, Ta Lian tribeg	Photo 78
79	2020-02-L79	275368	Feb. 13	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Mountainous-Level-Good	plant L 5-10 m, fruit D 21 cm, Mrs. Phanthala, Ta Liang tribe	Photo 79
80	2020-02-L80	275369	Feb. 13	<i>Lablab purpureus</i>	lablab bean	Seed	Ham (Thua Beab)	Landrace	Attapeu, Sarnxay, Nam Gon Nuan	N15-12-07.8	E107-08-18.6	864	Plain level-Level-Good	plant L 5-10 m, pod L 6-8 cm, Mrs. Phetkham, Ta Liang tribe	Photo 80
81	2020-02-L81	275370	Feb. 14	<i>Sorghum bicolor</i>	sorghum	Seed	Ba Yui (Kha Fang)	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	H 3 m, panicle L 30 cm, Mr. Phan Thong, Yea tribe	Photo 81
82	2020-02-L82	275371	Feb. 14	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	H 2.5 m, ear H 1-1.3 m, ear L 16cm, Mr. Phan Thong, Yea tribe	Photo 82
83	2020-02-L83	275372	Feb. 14	<i>Cucumis sativus</i>	cucumber	Seed	Mak Noi	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	plant L 4-5 m, fruit L 14 cm, Mr. Khammy, Yea tribe	Photo 83
84	2020-02-L84	275373	Feb. 14	<i>Vigna unguiculata</i>	cowpea	Seed	Thua (Pai Pla) Sii Dam	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	plant L 5-6 m, pod L 10 cm, Mr. Khammy, Yea tribe	Photo 84
85	2020-02-L85	275374	Feb. 14	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu (Neu)	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	plant L 10 m, fruit D 20 cm, Mr. Khammy, Yea tribe	Photo 85



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 (H: plant height, D: diameter, L: length)	Photo No.
86	2020-02-L86	275375	Feb. 14	<i>Setaria italica</i>	foxtail millet	Seed	Brao	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	H 1.5 m, panicle L 9 cm, Mr. Somemaiy, Yea tribe	Photo 86
87	2020-02-L87	275376	Feb. 14	<i>Pachyrhizus erosus</i>	yam bean	Seed	Man Pao (Pa Hon)	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	plant L 2-3 m, pod L 10-12 cm, Mr. Somemaiy, Yea tribe	Photo 87
88	2020-02-L88	275377	Feb. 14	<i>Oryza sativa</i>	upland rice	Seed	Khao Niao Gam Hai	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	H 1 m, panicle L 20 cm, Mrs. Yed, Yea tribe	Photo 88
89	2020-02-L89	275378	Feb. 14	<i>Oryza sativa</i>	upland rice	Seed	Khao Niao Khao	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	H 1 m, panicle L 20 cm, Mrs. Yed, Yea tribe	Photo 89
90	2020-02-L90	275379	Feb. 14	<i>Oryza sativa</i>	upland rice	Seed	Khao Jao Hai Khao	Landrace	Attapeu, Sarnxay, Nong Kai Aok	N15-02-54.2	E107-27-51.1	1,203	Mountainous-Slope-Good	H 1 m, panicle L 20 cm, Mrs. Yed, Yea tribe	Photo 90
91	2020-02-L91	275380	Feb. 14	<i>Setaria italica</i>	foxtail millet	Seed	Prao	Landrace	Attapeu, Sarnxay, Vang Taf Noy	N15-04-29.7	E107-24-12.1	870	Mountainous-Slope-Good	H 1.5-2 m, panicle L 22 cm, Mr. Phed Phan, Yea tribe	Photo 91
92	2020-02-L92	275381	Feb. 14	<i>Coix lacryma-jobi</i> var. <i>ma-yuen</i>	job's tears	Seed	Mak Duay	Landrace	Attapeu, Sarnxay, Vang Taf Noy	N15-04-29.7	E107-24-12.1	870	Mountainous-Slope-Good	H 1.5-2 m, panicle L 20 cm, Mr. Phed Phan, Yea tribe	Photo 92
93	2020-02-L93	275382	Feb. 14	<i>Vigna unguiculata</i>	cowpea	Seed	Mak Thua Khao	Landrace	Attapeu, Sarnxay, Vang Taf Noy	N15-04-29.7	E107-24-12.1	870	Mountainous-Slope-Good	plant L 2-3 m, pod L 19 cm, Mr. Phed Phan, Yea tribe	Photo 93
94	2020-02-L94	275383	Feb. 14	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Attapeu, Sarnxay, Vang Taf Noy	N15-04-29.7	E107-24-12.1	870	Mountainous-Slope-Good	H 2-2.5 m, ear H 1.5 m, ear L 16 cm, Mr. Phed Phan, Yea tribe	Photo 94
95	2020-02-L95	275384	Feb. 15	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng	Landrace	Attapeu, Sarnxay, Nong Far Mai	N14-47-59.1	E107-28-52.9	300	Mountainous-Slope-Good	plant L 3-4 m, fruit L 15 cm, Mr. Boualai, Yea tribe	Photo 95
96	2020-02-L96	275385	Feb. 15	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Attapeu, Sarnxay, Nong Far Mai	N14-47-59.1	E107-28-52.9	300	Mountainous-Slope-Good	H 2-2.5 m, ear H 1-1.5 m, ear L 13-15 cm, Mr. Boualai, Yea tribe	Photo 96
97	2020-02-L97	275386	Feb. 15	<i>Vigna unguiculata</i>	cowpea	Seed	Pai Tor (Thua)	Landrace	Attapeu, Sarnxay, Nong Far Mai	N14-47-59.1	E107-28-52.9	300	Mountainous-Slope-Good	plant L 4 m, pod L 21-23 cm, Mr. Boualai, Yea tribe	Photo 97
98	2020-02-L98	275387	Feb. 15	<i>Oryza sativa</i>	upland rice	Seed	Khao Jao	Landrace	Attapeu, Sarnxay, Nong Far Mai	N14-47-59.1	E107-28-52.9	300	Mountainous-Slope-Good	H 1.8-2 m, panicle L 20-21 cm, Mr. Boualai, Yea tribe	Photo 98
99	2020-02-L99	275388	Feb. 15	<i>Oryza sativa</i>	upland rice	Seed	Khao Niao	Landrace	Attapeu, Sarnxay, Nong Far Mai	N14-47-59.1	E107-28-52.9	300	Mountainous-Slope-Good	H 1.5 m, panicle L 15-20 cm, Mr. Boualai, Yea tribe	Photo 99
100	2020-02-L100	275389	Feb. 15	<i>Oryza sativa</i>	upland rice	Seed	Khao Jao Gam	Landrace	Attapeu, Sarnxay, Nong Far Mai	N14-47-59.1	E107-28-52.9	300	Mountainous-Slope-Good	H 1.5 m, panicle L 20-25 cm, Mr. Boualai, Yea tribe	Photo 100
101	2020-02-L101	275390	Feb. 16	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Phum (Met Deng)	Landrace	Champasack, Sukumma, Hong Hair	N14-38-29.4	E105-51-26.6	88	Plain level-Level-Good	plant L 1.5-1.8 m, pod L 23-25 cm, Mrs. Kham, Lao tribe	Photo 101
102	2020-02-L102	275391	Feb. 16	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Phum (Met Dam)	Landrace	Champasack, Sukumma, Hong Hair	N14-38-29.4	E105-51-26.6	88	Plain level-Level-Good	plant L 1.5-1.8 m, pod L 24-28 cm, Mrs. Kham, Lao tribe	Photo 102
103	2020-02-L103	275392	Feb. 16	<i>Mucuna pruriens</i>	velvet bean	Seed	Thua Kho	Landrace	Champasack, Sukumma, Hong Hair	N14-38-29.4	E105-51-26.6	88	Plain level-Level-Good	plant L 2 m, pod L 9-10 cm, Mrs. Kham, Lao tribe	Photo 103
104	2020-02-L104	275393	Feb. 16	<i>Lablab purpureus</i>	lablab bean	Seed	Thua Peab	Landrace	Champasack, Sukumma, Hong Hair	N14-38-29.4	E105-51-26.6	88	Plain level-Level-Good	plant L 2 m, pod L 7-9 cm, Mrs. Kham, Lao tribe	Photo 104
105	2020-02-L105	275394	Feb. 16	<i>Arachis hypogaea</i>	peanut	Seed	Thua Din	Landrace	Champasack, Sukumma, Hong Hair	N14-38-29.4	E105-51-26.6	88	Plain level-Level-Good	H 0.5 m, pod L 4-5 cm, Mrs. Kham, Lao tribe	Photo 105
106	2020-02-L106	275395	Feb. 16	<i>Cajanus cajan</i>	pigeon pea	Seed	Thua Hair	Landrace	Champasack, Sukumma, Hong Hair	N14-38-29.4	E105-51-26.6	88	Plain level-Level-Good	H 1.8-2.2 m, pod L 6 cm, Mrs. Kham, Lao tribe	Photo 106
107	2020-02-L107	275396	Feb. 16	<i>Vigna radiata</i>	mung bean	Seed	Thua Khieo	Landrace	Champasack, Sukumma, Hong Hair	N14-38-29.4	E105-51-26.6	88	Plain level-Level-Good	plant L 0.8-1 m, Mrs. Kham, Lao tribe	Photo 107

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 (H: plant height, D: diameter, L: length)	Photo No.
108	2020-02-L108	275397	Feb. 16	<i>Vigna radiata</i>	mung bean	Seed	Thua Khieo (Fak Khao)	Landrace	Champasack, Sukumma, Hong Hair	N14-38-29.4	E105-51-26.6	88	Plain level-Level-Good	plant L 0.6-1 m, pod L 7-8 cm, Mrs. Kham, Lao tribe	Photo 108
109	2020-02-L109	275398	Feb. 16	<i>Vigna radiata</i>	mung bean	Seed	Thua Khieo (Fak Dam)	Landrace	Champasack, Sukumma, Hong Hair	N14-38-29.4	E105-51-26.6	88	Plain level-Level-Good	plant L 0.6-1 m, pod L 6-8 cm, Mrs. Kham, Lao tribe	Photo 109
110	2020-02-L110	275399	Feb. 16	<i>Vigna unguiculata</i> var. <i>sesquipedalis</i>	yardlong bean	Seed	Thua Kra (Met Dam)	Landrace	Champasack, Sukumma, Lat	N14-37-44.0	E105-46-35.8	96	Plain level-Level-Good	plant L 2 m, pod L 30-40 cm, Mrs. Tuay, Lao (Suay) tribe	Photo 110
111	2020-02-L111	275400	Feb. 16	<i>Vigna unguiculata</i> var. <i>sesquipedalis</i>	yardlong bean	Seed	Thua Kra (Teng)	Landrace	Champasack, Sukumma, Lat	N14-37-44.0	E105-46-35.8	96	Plain level-Level-Good	plant L 2-3 m, pod L 30-40 cm, Mrs. Tuay, Lao (Suay) tribe	Photo 111
112	2020-02-L112	275401	Feb. 16	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Phum (Met Deng)	Landrace	Champasack, Sukumma, Lat	N14-37-44.0	E105-46-35.8	96	Plain level-Level-Good	plant L 50-60 cm, pod L 15-20 cm, Mrs. Tuay, Lao (Suay) tribe	Photo 112
113	2020-02-L113	275402	Feb. 16	<i>Vigna unguiculata</i> var. <i>sesquipedalis</i>	yardlong bean	Seed	Thua Phum (Met Deng)	Landrace	Champasack, Sukumma, Lat	N14-37-44.0	E105-46-35.8	96	Plain level-Level-Good	plant L 0.5-0.6 m, pod L 20-25 cm, Mrs. Tuay, Suay tribe	Photo 113
114	2020-02-L114	275403	Feb. 16	<i>Citrullus lanatus</i>	watermelon	Seed	Mak Mo Khieo	Landrace	Champasack, Sukumma, Lat	N14-37-44.0	E105-46-35.8	96	Plain level-Level-Good	plant L 3-4 m, fruit L 15-20 cm, Mrs. Tuay, Suay tribe	Photo 114
115	2020-02-L115	275404	Feb. 16	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng	Landrace	Champasack, Sukumma, Lat	N14-37-44.0	E105-46-35.8	96	Plain level-Level-Good	plant L 4-5 m, fruit L 25-30 cm, Mr. Pim, Suay tribe	Photo 115
116	2020-02-L116	275405	Feb. 16	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Suan (Met Dam Noi)	Landrace	Champasack, Sukumma, Phone	N14-37-21.1	E105-46-47.2	91	Plain level-Level-Good	plant L 4-5 m, pod L 15-20 cm, Mrs. Seng, Suay tribe	Photo 116
117	2020-02-L117	275406	Feb. 16	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Lian (Thua Na Son)	Landrace	Champasack, Sukumma, Phone	N14-37-21.1	E105-46-47.2	91	Plain level-Level-Good	plant L 6-7 m, pod L 15-20 cm, Mrs. Seng, Suay tribe	Photo 117
118	2020-02-L118	275407	Feb. 16	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Na Yao	Landrace	Champasack, Sukumma, Phone	N14-37-21.1	E105-46-47.2	91	Plain level-Level-Good	plant L 6-10 m, pod L 20-25 cm, Mrs. Seng, Suay tribe	Photo 118
119	2020-02-L119	275408	Feb. 16	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Far Khua (Fak Lay)	Landrace	Champasack, Sukumma, Phone	N14-37-21.1	E105-46-47.2	91	Plain level-Level-Good	plant L 2 m, pod L 20-25 cm, Mrs. Mee, Suay tribe	Photo 119
120	2020-02-L120	275409	Feb. 16	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Phum (Fak Lay)	Landrace	Champasack, Sukumma, Phone	N14-37-21.1	E105-46-47.2	91	Plain level-Level-Good	plant L 0.5-0.6 m, pod L 15-20 cm, Mrs. Mee, Suay tribe	Photo 120
121	2020-02-L121	275410	Feb. 17	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Pii	Landrace	Champasack, Sukumma, Nondeng	N14-45-31.2	E105-36-47.2	114	Plain level-Level-Moderate	plant L 5 m, pod L 40 cm, Mrs. Boua and Souvan, Lao tribe	Photo 121
122	2020-02-L122	275411	Feb. 17	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Dor (Met Lay)	Landrace	Champasack, Sukumma, Kakkong	N14-32-34.4	E105-34-53.6	134	Plain level-Level-Poor	plant L more than 5 m, pod L 40 cm, Mrs. Mone, Lao tribe	Photo 122
123	2020-02-L123	275412	Feb. 17	<i>Vigna unguiculata</i>	cowpea	Seed	Thua (Met Dam)	Landrace	Champasack, Sukumma, Kakkong	N14-32-34.4	E105-34-53.6	134	Plain level-Level-Poor	plant L more than 5 m, pod L 40 cm, Mrs. Mone, Lao tribe	Photo 123
124	2020-02-L124	275413	Feb. 17	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Pii	Landrace	Champasack, Sukumma, Kakkong	N14-32-34.4	E105-34-53.6	134	Plain level-Level-Poor	plant L more than 5 m, pod L 20 cm, Mr. Poun, Lao tribe	Photo 124
125	2020-02-L125	275414	Feb. 17	<i>Psophocarpus tetragonolobus</i>	winged bean	Seed	Thua Phu	Landrace	Champasack, Sukumma, Kakkong	N14-32-34.4	E105-34-53.6	134	Plain level-Level-Poor	plant L more than 5 m, pod L 25 cm, Mr. Poun, Lao tribe	Photo 125
126	2020-02-L126	275415	Feb. 17	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu	Landrace	Champasack, Sukumma, Kakkong	N14-32-34.4	E105-34-53.6	134	Plain level-Level-Poor	plant L more than 5 m, fruit D 80 cm, Mr. Poun, Lao tribe	Photo 126

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 (H: plant height, D: diameter, L: length)	Photo No.
127	2020-02-L127	275416	Feb. 17	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng Ching (Noua Noi)	Landrace	Champasack, Sukumma, Kkokong	N14-32-34.4	E105-34-53.6	134	Plain level-Level-Poor	plant L 5 m, fruit L 10-15 cm, Mr. Poun, Lao tribe	Photo 127
128	2020-02-L128	275417	Feb. 17	<i>Cucumis sativus</i>	cucumber	Seed	Teng Yai	Landrace	Champasack, Sukumma, Kkokong	N14-32-34.4	E105-34-53.6	134	Plain level-Level-Poor	plant L more than 5 m, fruit L 30-50 cm, Mr. Poun, Lao tribe	Photo 128
129	2020-02-L129	275418	Feb. 18	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Pii	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	plant L more than 5 m, pod L 20-30 cm, Mr. Lrom, Khmer tribe	Photo 129
130	2020-02-L130	275419	Feb. 18	<i>Vigna umbellata</i>	ricebean	Seed	Thua Dam	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	H more than 5 m, panicle L 10 cm, Mr. Lrom, Khmer tribe	Photo 130
131	2020-02-L131	275420	Feb. 18	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu (Muay Yao)	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	plant L more than 5 m, fruit D 30-50 cm, Mr. Lrom, Khmer tribe	Photo 131
132	2020-02-L132	275421	Feb. 18	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng Lay	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	plant L more than 5 m, fruit L 20-30 cm, Mrs. Lrom, Khmer tribe	Photo 132
133	2020-02-L133	275422	Feb. 18	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu (Muay Mon)	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	plant L more than 5 m, fruit D 15-20 cm, Mrs. Phone + Mr. Say, Khmer tribe	Photo 133
134	2020-02-L134	275423	Feb. 18	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng Kua	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	plant L more than 5 m, fruit L 15-20 cm, Mr. Lrom, Khmer tribe	Photo 134
135	2020-02-L135	275424	Feb. 18	<i>Citrullus lanatus</i>	watermelon	Seed	Mak Mo	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	plant L 5 m, fruit L 15 cm, Mr. Lrom, Khmer tribe	Photo 135
136	2020-02-L136	275425	Feb. 18	<i>Solanum melongena</i>	eggplant	Seed	Mak Khua	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	H 70 cm, fruit L 5-7 cm, Mr. Lrom, Khmer tribe	Photo 136
137	2020-02-L137	275426	Feb. 18	<i>Luffa cylindrica</i>	luffa	Seed	Mak Buab Son	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	plant L more than 5 m, fruit L 20 cm, Mr. Lrom, Khmer tribe	Photo 137
138	2020-02-L138	275427	Feb. 18	<i>Luffa cylindrica</i>	luffa	Seed	Mak Buab Yao	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	plant L more than 5 m, fruit L 50 cm, Mr. Lrom, Khmer tribe	Photo 138
139	2020-02-L139	275428	Feb. 18	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Moderate	H 3 m, ear L 10-15 cm, Mr. Lrom, Khmer tribe	Photo 139
140	2020-02-L140	275429	Feb. 18	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Good	H 3 m, ear L 20-25 cm, Mr. Lrom, Khmer tribe	Photo 140
141	2020-02-L141	275430	Feb. 18	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Good	H 2 m, ear L 10-15 cm, Mr. Lrom, Khmer tribe	Photo 141
142	2020-02-L142	275431	Feb. 18	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Pii	Landrace	Champasack, Mounlapamok, Houay Xai	N14-27-21.0	E105-31-45.0	113	Plain level-Level-Good	plant L more than 5 m, pod L 21-23 cm, Mr. Lrom, Khmer tribe	Photo 142
143	2020-02-L143	275432	Feb. 19	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Pii	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L 7-8 m, pod L 20-25 cm, Mr. Somephone Chenthavong, Lao tribe	Photo 143
144	2020-02-L144	275433	Feb. 19	<i>Lablab purpureus</i>	lablab bean	Seed	Thua Peab	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L more than 7 m, pod L 10 cm, Mrs. Suam, Lao tribe	Photo 144
145	2020-02-L145	275434	Feb. 19	<i>Psophocarpus tetragonolobus</i>	winged bean	Seed	Thua Phu	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L more than 5 m, pod L 22 cm, Mrs. Suam, Lao tribe	Photo 145
146	2020-02-L146	275435	Feb. 19	<i>Pachyrhizus erosus</i>	yam bean	Seed	Met Mon Phao	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L 5 m, panicle L 10-15 cm, Mr. Kii, Lao tribe	Photo 146
147	2020-02-L147	275436	Feb. 19	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L 5 m, fruit D 25-30 cm, Mr. May, Lao tribe	Photo 147
148	2020-02-L148	275437	Feb. 19	<i>Cajanus cajan</i>	pigeon pea	Seed	Thua Hair	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	H 3 m, pod L 5 cm, Mrs. Oh, Lao tribe	Photo 148

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 (H: plant height, D: diameter, L: length)	Photo No.
149	2020-02-L149	275438	Feb. 19	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L 5 m, fruit D 20-30 cm, Mrs. Bounmy, Lao tribe	Photo 149
150	2020-02-L150	275439	Feb. 19	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L more than 5 m, fruit D 20-30 cm, Mrs. Oh, Lao tribe	Photo 150
151	2020-02-L151	275440	Feb. 19	<i>Abelmoschus esculentus</i>	okra	Seed	Mak O Win Tin	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L 1.5-2 m, pod L 10 cm, Mrs. Pon, Lao tribe	Photo 151
152	2020-02-L152	275441	Feb. 19	<i>Solanum melongena</i>	eggplant	Seed	Mak Khua Por (Sii Khieo)	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	H 70 cm, fruit L 2-5 cm, Mrs. Pon, Lao tribe	Photo 152
153	2020-02-L153	275442	Feb. 19	<i>Capsicum annum</i>	chili	Seed	Mak Phet	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	H 70 cm, pod L 3 cm, Mrs. Phou Van, Lao tribe	Photo 153
154	2020-02-L154	275443	Feb. 19	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L 5 m, fruit L 25-30 cm, Mrs. Yai Pon, Lao tribe	Photo 154
155	2020-02-L155	275444	Feb. 19	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng Ching	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L more than 5 m, fruit L 15-20 cm, Mrs. Yai Pon, Lao tribe	Photo 155
156	2020-02-L156	275445	Feb. 19	<i>Luffa cylindrica</i>	luffa	Seed	Mak Buab	Landrace	Champasack, Kong, Na Nong Hiay	N14-02-07.0	E106-03-00.1	99	Plain level-Level-Moderate	plant L more than 5 m, fruit L 45-50 cm, Mrs. Yai Pon, Lao tribe	Photo 156
157	2020-02-L157	275446	Feb. 20	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Champasack, Kong, Xot	N14-02-05.5	E106-07-01.4	77	Plain level-Level-Moderate	H 1.5-2 m, ear L 10 cm, Mr. Mor Thiang, Lao tribe	Photo 157
158	2020-02-L158	275447	Feb. 20	<i>Zea mays</i>	maize	Seed	Saly	Landrace	Champasack, Kong, Xot	N14-02-05.5	E106-07-01.4	77	Plain level-Level-Moderate	H 2 m, ear L 14 cm, Mr. Fay, Lao tribe	Photo 158
159	2020-02-L159	275448	Feb. 20	<i>Vigna unguiculata</i>	cowpea	Seed	Thua Pii	Landrace	Champasack, Kong, Xot	N14-02-05.5	E106-07-01.4	77	Plain level-Level-Moderate	plant L more than 5 m, pod L 16 cm, Mr. Fay, Lao tribe	Photo 159
160	2020-02-L160	275449	Feb. 20	<i>Capsicum annum</i>	chili	Seed	Mak Phet	Landrace	Champasack, Kong, Xot	N14-02-05.5	E106-07-01.4	77	Plain level-Level-Moderate	H 70 cm-1 m, pod L 3-4 cm, Mr. Fay, Lao tribe	Photo 160
161	2020-02-L161	275450	Feb. 20	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng Kua	Landrace	Champasack, Kong, Xot	N14-02-05.5	E106-07-01.4	77	Plain level-Level-Moderate	plant L more than 3 m, fruit L 15-20 cm, Mr. Fay, Lao tribe	Photo 161
162	2020-02-L162	275451	Feb. 20	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng Xang	Landrace	Champasack, Kong, Xot	N14-02-05.5	E106-07-01.4	77	Plain level-Level-Moderate	plant L more than 5 m, fruit L 15-20 cm, Mr. Fay, Lao tribe	Photo 162
163	2020-02-L163	275452	Feb. 20	<i>Cucumis sativus</i>	cucumber	Seed	Mak Teng Ching	Landrace	Champasack, Kong, Napa Kiap	N14-01-38.1	E106-09-04.1	73	Plain level-Level-Moderate	plant L 2-3 m, fruit L 30 cm, Mr. Kham Soek, Lao tribe	Photo 163
164	2020-02-L164	275453	Feb. 20	<i>Cucurbita moschata</i>	pumpkin	Seed	Mak Eu	Landrace	Champasack, Kong, Napa Kiap	N14-01-38.1	E106-09-04.1	73	Plain level-Level-Moderate	plant L more than 5 m, fruit D 30 cm, Mr. Bounkong, Lao tribe	Photo 164



Photo 1.  
Sorghum (L1)



Photo 2.  
Sorghum (L2)



Photo 3.  
Finger millet (L3)



Photo 4.  
Maize (L4)

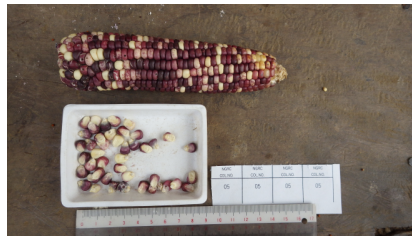


Photo 5.  
Maize (L5)



Photo 6.  
Peanut (L6)



Photo 7.  
Cowpea (L7)



Photo 8.  
Cucumber (L8)



Photo 9.  
Pumpkin (L9)



Photo 10.  
Eggplant (L10)



Photo 11.  
Winter melon (L11)



Photo 12.  
Ricebean (L12)



Photo 13.  
Upland rice (L13)



Photo 14.  
Mustard (L14)



Photo 15.  
Finger millet (L15)



Photo 16.  
Finger millete (L16)



Photo 17.  
Maize (L17)



Photo 18.  
Maize (L18)



Photo 19.  
Cowpea (L19)



Photo 20.  
Upland rice (L20)



Photo 21.  
Upland rice (L21)



Photo 22.  
Upland rice (L22)



Photo 23.  
Finger millet (L23)



Photo 24.  
Sorghum (L24)



Photo 25.  
Sorghum (L25)



Photo 26.  
Sorghum (L26)



Photo 27.  
Foxtail millet (L27)



Photo 28.  
Maize (L28)



Photo 29.  
Maize (L29)



Photo 30.  
Maize (L30)



Photo 31.  
Cowpea (L31)



Photo 32.  
Cowpea (L32)



Photo 33.  
Cowpea (L33)



Photo 34.  
Lablab bean (L34)



Photo 35.  
Upland rice (L35)



Photo 36.  
Upland rice (L36)

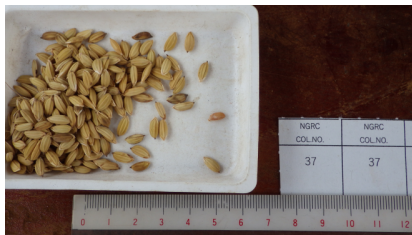


Photo 37.  
Upland rice (L37)

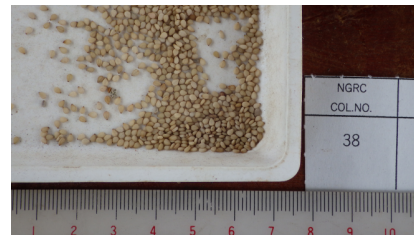


Photo 38.  
Sesame (L38)



Photo 39.  
Pumpkin (L39)



Photo 40.  
Cucumber (L40)



Photo 41.  
Winter melon (L41)



Photo 42.  
Luffa (L42)



Photo 43.  
Upland rice (L43)



Photo 44.  
Finger millet (L44)



Photo 45.  
Maize (L45)



Photo 46.  
Maize (L46)



Photo 47.  
Cowpea (L47)



Photo 48.  
Lablab bean (L48)



Photo 49.  
Yam bean (L49)



Photo 50.  
Upland rice (L50)



Photo 51.  
Upland rice (L51)



Photo 52.  
Upland rice (L52)



Photo 53.  
Upland rice (L53)



Photo 54.  
Upland rice (L54)



Photo 55.  
Upland rice (L55)



Photo 56.  
Upland rice (L56)



Photo 57.  
Chili (L57)



Photo 58.  
Pumpkin (L58)



Photo 59.  
Cucumber (L59)



Photo 60.  
Finger millet (L60)





Photo 61.  
Finger millet (L61)



Photo 62.  
Sorghum (L62)



Photo 63.  
Maize (L63)



Photo 64.  
Cowpea (L64)



Photo 65.  
Cucumber (L65)



Photo 66.  
Job's tears (L66)



Photo 67.  
Pumpkin (L67)

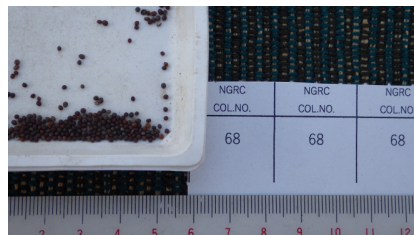


Photo 68.  
Mustard (L68)



Photo 69.  
Sorghum (L69)



Photo 70.  
Cowpea (L70)



Photo 71.  
Maize (L71)



Photo 72.  
Job's tears (L72)



Photo 73.  
Finger millet (L73)



Photo 74.  
Maize (L74)



Photo 75.  
Cowpea (L75)



Photo 76.  
Cowpea (L76)



Photo 77.  
Yardlong bean (L77)



Photo 78.  
Cucumber (L78)



Photo 79.  
Pumpkin (L79)



Photo 80.  
Lablab bean (L80)



Photo 81.  
Sorghum (L81)



Photo 82.  
Maize (L82)



Photo 83.  
Cucumber (L83)



Photo 84.  
Cowpea (L84)



Photo 85.  
Pumpkin (L85)



Photo 86.  
Foxtail millet (L86)



Photo 87.  
Yam bean (L87)



Photo 88.  
Upland rice (L88)



Photo 89.  
Upland rice (L89)



Photo 90.  
Upland rice (L90)



Photo 91.  
Foxtail millet (L91)



Photo 92.  
Job's tears (L92)



Photo 93.  
Cowpea (L93)



Photo 94.  
Maize (L94)



Photo 95.  
Cucumber (L95)



Photo 96.  
Maize (L96)



Photo 97.  
Cowpea (L97)



Photo 98.  
Upland rice (L98)



Photo 99.  
Upland rice (L99)



Photo 100.  
Upland rice (L100)



Photo 101.  
Cowpea (L101)



Photo 102.  
Cowpea (L102)



Photo 103.  
Velvet bean (L103)



Photo 104.  
Lablab bean (L104)



Photo 105.  
Peanut (L105)



Photo 106.  
Pigeon pea (L106)



Photo 107.  
Mung bean (L107)

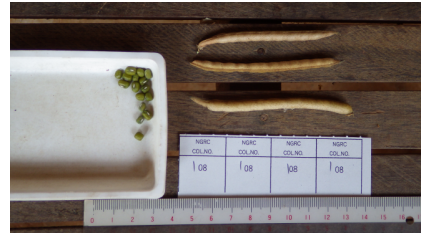


Photo 108.  
Mung bean (L108)



Photo 109.  
Mung bean (L109)



Photo 110.  
Yardlong bean (L110)



Photo 111.  
Yardlong bean (L111)



Photo 112.  
Cowpea (L112)



Photo 113.  
Yardlong bean (L113)



Photo 114.  
Watermelon (L114)



Photo 115.  
Cucumber (L115)



Photo 116.  
Cowpea (L116)



Photo 117.  
Cowpea (L117)



Photo 118.  
Cowpea (L118)



Photo 119  
Cowpea (L119)



Photo 120.  
Cowpea (L120)



Photo 121.  
Cowpea (L121)



Photo 122.  
Cowpea (L122)



Photo 123.  
Cowpea (L123)



Photo 124.  
Cowpea (L124)



Photo 125.  
Winged bean (L125)



Photo 126.  
Pumpkin (L126)



Photo 127.  
Cucumber (L127)



Photo 128.  
Cucumber (L128)



Photo 129.  
Cowpea (L129)



Photo 130.  
Ricebean (L130)



Photo 131.  
Pumpkin (L131)



Photo 132.  
Cucumber (L132)



Photo 133.  
Pumpkin (L133)



Photo 134.  
Cucumber (L134)



Photo 135.  
Watermelon (L135)

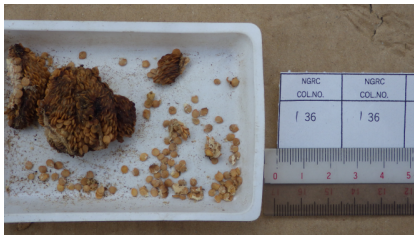


Photo 136.  
Eggplant (L136)



Photo 137.  
Luffa (L137)



Photo 138.  
Luffa (L138)



Photo 139.  
Maize (L139)



Photo 140.  
Maize (L140)



Photo 141.  
Maize (L141)



Photo 142.  
Cowpea (L142)



Photo 143.  
Cowpea (L143)



Photo 144.  
Lablab bean (L144)



Photo 145.  
Winged bean (L145)



Photo 146.  
Yam bean (L146)



Photo 147.  
Pumpkin (L147)



Photo 148.  
Pigeon pea (L148)



Photo 149.  
Pumpkin (L149)



Photo 150.  
Pumpkin (L150)



Photo 151.  
Okra (L151)



Photo 152.  
Eggplant (L152)



Photo 153.  
Chili (L153)



Photo 154.  
Cucumber (L154)



Photo 155.  
Cucumber (L155)



Photo 156.  
Luffa (L156)



Photo 157.  
Maize (L157)



Photo 158.  
Maize (L158)



Photo 159.  
Cowpea (L159)



Photo 160.  
Chili (L160)



Photo 161.  
Cucumber (L161)



Photo 162.  
Cucumber (L162)



Photo 163.  
Cucumber (L163)



Photo 164.  
Pumpkin (L164)