Collection of Millet Germplasm in Sri Lanka and Thailand


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1. Introduction

Millet were common as food crops throughout Asia. Recently, improved varieties of profitable crops like rice and maize distribute widely and millets are rapidly disappearing from farmers' fields year by year. Millets are cultivated only sporadically on a small scale at present. Therefore, millet germplasm in this area is needed to be collected and preserved urgently.

The present exploration program was made under the Gene Bank Project of Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan. Attention was focused on collecting millet germplasm in Asia which was considered as one of the gene centers of millets. This program was achieved in cooperation with the Governments of Sri Lanka and Thailand.

2. Joint Exploration in Sri Lanka

a) Method

Two exploration trips were carried out. The first exploration trip was made from January 10th to 15th at eleven sites in Matale, Polonnaruwa and Anuradhapura Districts in North Central and North Western Provinces. The second exploration was made from January 18th to 22nd at fourteen sites in Kandy, Badulla, Moneragala and Hambantota Districts in Southern Provinces. The route of the exploration and detailed itinerary are shown in Fig. 1 and Table 1, respectively.

Farmers' fields and houses were visited during the exploration. Plant height, panicle length, stem color, seed coat color, panicle number, disease injuries and other traits were recorded. The conditions of location such as altitude, topography, drainage, etc. were also recorded. Farmers were interviewed about farming information, including cropping season,
Fig. 1  The exploration routes in Sri Lanka

スリランカにおける探索ルート
<table>
<thead>
<tr>
<th>Date (1992)</th>
<th>Itinerary</th>
<th>Lodging</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>Narita(12:30)---Bangkok(18:00)</td>
<td>Bangkok</td>
<td>flight, TG-641</td>
</tr>
<tr>
<td>7 Tue.</td>
<td>Bankok(10:30)---Colombo(12:25)</td>
<td>Kandy</td>
<td>flight, TG-307</td>
</tr>
<tr>
<td>8 Wed.</td>
<td>Courtesy visit to Japanese Embassy, Sri Lanka</td>
<td>Kandy</td>
<td>meeting with Mr. Murakami, 1st Sec.</td>
</tr>
<tr>
<td>9 Thu.</td>
<td>Colombo---Kandy(116km, 3 hours)</td>
<td>Kandy</td>
<td>by car</td>
</tr>
<tr>
<td></td>
<td>Meeting with Deputy Director of Agriculture(Research), and assistant DDR</td>
<td>Kandy</td>
<td>Dr. S. Amarasin(DDR), Dr. S. D. Jayawardene(ADDR)</td>
</tr>
<tr>
<td></td>
<td>Discussion of the program and making arrangements at PGRRC</td>
<td>Kandy</td>
<td>with Dr. P. Ganeshan and Dr. S. Watanabe</td>
</tr>
<tr>
<td>10 Fri.</td>
<td>Visit to the Herbarium at the Botanical Gardens</td>
<td>Sigiriya</td>
<td>by car</td>
</tr>
<tr>
<td>11 Sat.</td>
<td>Arrangements and preparation</td>
<td>Polonnaruwa</td>
<td>by car, 235km</td>
</tr>
<tr>
<td>12 Sun.</td>
<td>Leave Kandy to Sigiriya(112km)</td>
<td>Polonnaruwa</td>
<td>11 samples collected</td>
</tr>
<tr>
<td>13 Mon.</td>
<td>Exploration in Sigiriya, Naula</td>
<td>Anuradhapura</td>
<td>by car, 143km</td>
</tr>
<tr>
<td>14 Tue.</td>
<td>Visit to Aralaganvila Reg. Agric. Res. Centre</td>
<td>Anuradhapura</td>
<td>8 samples collected</td>
</tr>
<tr>
<td>15 Wed.</td>
<td>Exploration in Migawswawa and arround near by Mt. Maderigiriya</td>
<td>Anuradhapura</td>
<td>by car, 172km</td>
</tr>
<tr>
<td>16 Thu.</td>
<td>Visit to Anuradhapura Agr. Ext. Office</td>
<td>Anuradhapura</td>
<td>11 samples collected</td>
</tr>
<tr>
<td>17 Fri.</td>
<td>Visit to Maha Illupallama Reg. Agric. Res. Centre</td>
<td>Anuradhapura</td>
<td>6 samples collected</td>
</tr>
<tr>
<td>18 Sat.</td>
<td>Exploration in Kahatagasdigiliya</td>
<td>Kandy</td>
<td>by car, 102km</td>
</tr>
<tr>
<td>19 Sun.</td>
<td>Exploration in Talawa, Mahagalkadawala, Galgamuwa</td>
<td>Kandy</td>
<td>by car, 140km</td>
</tr>
<tr>
<td>20 Mon.</td>
<td>Return to Kandy</td>
<td>Kandy</td>
<td>9 samples collected</td>
</tr>
<tr>
<td>21 Tue.</td>
<td>Processing of seeds, keeping them in the drying room in PGRC</td>
<td>Kandy</td>
<td>at PGRC</td>
</tr>
<tr>
<td>22 Wed.</td>
<td>Continue seeds processing</td>
<td>Kandy</td>
<td>at PGRC</td>
</tr>
<tr>
<td></td>
<td>Preparation for the second trip</td>
<td>Mahiyangana</td>
<td>by car, 149km</td>
</tr>
<tr>
<td></td>
<td>Leave Kandy</td>
<td>Mahiyangana</td>
<td>17 samples collected</td>
</tr>
<tr>
<td></td>
<td>Exploration in Madugalle, Uraniya, Karametiya</td>
<td>Badulla</td>
<td>by car, 105km</td>
</tr>
<tr>
<td></td>
<td>Exploration in Mahiyangana, Taldena, Passara, Badulla</td>
<td>Badulla</td>
<td>14 samples collected</td>
</tr>
<tr>
<td></td>
<td>Exploration in Passara, Moneragala, Tissamaharama, Kataragama</td>
<td>Tissamaharama</td>
<td>by car, 173km</td>
</tr>
<tr>
<td></td>
<td>Exploration in Wirawila, Tanamalwila</td>
<td>Nuwara Eliya</td>
<td>10 samples collected</td>
</tr>
<tr>
<td></td>
<td>Return to Kandy</td>
<td>Nuwara Eliya</td>
<td>by car, 179km</td>
</tr>
<tr>
<td></td>
<td>Drying seeds</td>
<td>Kandy</td>
<td>by car, 77km</td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Date (1992)</th>
<th>Itinerary</th>
<th>Lodging</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Tue.</td>
<td>Processing of seeds</td>
<td>Kandy</td>
<td>at PGRC</td>
</tr>
<tr>
<td></td>
<td>Arrangement of collection record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Fri.</td>
<td>Arrangement and quarantine</td>
<td>Kandy</td>
<td>at PGRC</td>
</tr>
<tr>
<td></td>
<td>Writing report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 Sat.</td>
<td>Leave Kandy to Colombo                                                                  Colombo</td>
<td>by car</td>
<td></td>
</tr>
<tr>
<td>27 Mon.</td>
<td>Courtesy visit to Japanese Embassy                                                    Bangkok</td>
<td>meeting with Mr. Kuroki, 1st Sec. with Mr. Thanit, Director of Suphan Buri FCRC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discussion of the program and making arrangements</td>
<td></td>
<td>flight, TG-114</td>
</tr>
<tr>
<td>28 Tue.</td>
<td>Bangkok (9:50) --- Chiang Mai (10:45)                                                   Chiang Mai</td>
<td>with Deputy Director of Chiang Mai FCRC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meeting and arrangement at Chiang Mai FCRC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Visit to the market in Chiang Mai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 Wed.</td>
<td>Exploration in Pang Hang, Sop O Nok, Chiang Dao, Fa Hin</td>
<td>Chiang Mai</td>
<td>by car, 283km</td>
</tr>
<tr>
<td>30 Tue.</td>
<td>Exploration in Pang Nam Tu, Mae Khajian, Phayao                                        Chiang Mai</td>
<td>by car, 322km</td>
<td></td>
</tr>
<tr>
<td>31 Fri.</td>
<td>Exploration in Doi Inthanon, Mae Chaem, Om Khul                                        Chiang Mai</td>
<td>2 samples collected</td>
<td></td>
</tr>
<tr>
<td>Feb.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Sat.</td>
<td>Exploration in Doi Suthep                                                              Chiang Mai</td>
<td>by car</td>
<td></td>
</tr>
<tr>
<td>2 Sun.</td>
<td>Processing of seeds                                                                    Chiang Mai</td>
<td>2 samples collected</td>
<td></td>
</tr>
<tr>
<td>3 Mon.</td>
<td>Continue seeds processing, packing                                                      Chiang Mai</td>
<td>at Chiang Mai FCRC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meeting and discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Tue.</td>
<td>Chiang Mai (9:40) --- Bangkok (10:35)                                                  Bangkok</td>
<td>flight, TG-101</td>
<td></td>
</tr>
<tr>
<td>5 Wed.</td>
<td>Bangkok (10:30) --- Narita (18:00)</td>
<td></td>
<td>flight, TG-760</td>
</tr>
</tbody>
</table>
cultural practices, local name, usage, eating habits and history of introduction. Seed samples were collected mainly from farmers’ field, but when seeds were immature, seeds preserved in farmers’ houses were collected. Some samples were collected from local markets.

b) Results and Discussion

The acreage of finger millet, foxtail millet and proso millet in 1988 was 11,081 ha, 58 ha and 338 ha, respectively. Finger millet is grown in the rainy season called “maha” season characterized by northeast monsoon. Limited amount of finger millet is grown in the dry season “yala” characterized by southwest monsoon in Jaffna District. Finger millet is also grown in mixed with maize, musturd and sorghum in the rainfed shifting agriculture called “chena”. Foxtail millet and proso millet are cultivated mainly from the end of “maha” to “yala” season.

Finger millet (*Eleusine coracana*) : Finger millet, called “kourakhan”, “kurakkana” or “kurakhan”, is grown most widely in this country, and is especially important in the dry zone. It is sown directly in the upland fields during the rainy season, from the middle of September to October. It is harvested by cutting at the neck of ears with small sickles in January, dried on the ground and threshed by beating with wooden sticks. Grains are ground with a stone mill for preparing a pancake called “rohty” or “rotty” and paste.

Forty seven samples of finger millet were collected in 25 sites of 8 districts which were located on the altitude from 0m to 500m. Most of samples were collected from farmers’ fields or houses, except for samples No. 19, No. 54 and No. 73 which were collected from the local markets. According to hearing to the farmers, finger millet has been cultivated for a long time and these seeds are “attarak mattarah”, which means “handed down from the generation of grandfather’s grandfather”.

There were various types of finger millet. The length of panicles ranged from 3cm to 8cm, number of fingers from 2 to 10, and plant height from 60cm to 140cm. There was an accession with incurved panicle. Some plants have purple nodes, purple anthers and purple panicles growing among normal types. Ear brust damage or neck brust damage was found in some samples. One sample, No. 28, was damaged by aphids.

Foxtail millet (*Setaria italica*) : Foxtail millet is called “thanahal” or “tanahal” and widely grown in dry zone and intermediate zone. It was observed that foxtail millet was sometimes grown mixed with finger millet. The number of foxtail millet, however, was much smaller than finger millet in mixed population. Farmers said that the mixed seeds of foxtail millet and finger millet were sown.

Foxtail millet is an important crop in some areas of the dry zone in this country. Its grains were consumed after boiling like rice or were used to cook gruel.

Twenty two samples with various characteristics, including a wild type of *Setaria* species
(perhaps *Setaria glauca* Beauv.) called "balo tone" in local language were collected. Plant height ranged from 100cm to 200cm and panicle length from 7.5cm to 25cm. Glume color was classified into whitish yellow, yellow, orange, and blackish brown. Two samples, No.36 and No.44, had brown lesions on their leaves.

Proso millet (*Panicum miliaceum*) : Proso millet called "mineri" is cultivated mainly in the dry "yalu" season. It is sown from April to May. Three samples from farmers’ houses and three bulk samples from the local markets in Matale, Badulla and Hambantota were collected. The plants of proso millet were found in a field, but the seeds were still immature. Seed coat color was either yellow or gray. Its grains are cooked in the same way as rice.

No sample of little millet or samai (*Panicum miliare* Lam.) locally called "hyie miner" was collected in the area.

Other crops: Farmers tended to plant several crops in the same field under shifting agriculture "chena". Two landraces of sorghum (*Sorghum bicolor* Moench) called "waguruh" were obtained from two sites in Badulla District. Seeds were either white or light brown in color. Head length were 13cm and 25cm.

A sample of maize (*Zea mays* L.) was collected in the site located 23km from Madirigiriya in Polonnaruwa District. This was cultivated in the "maha" season matured in three months. Ear length was 14cm and kernel color was light purple. Young ears are boiled like sweet corn in Japan.

Five samples of mustard (*Brassica juncea* Coss.) locally called "aba" were collected from 5 sites of "chena" in Matale, Polonnaruwa and Anuradhapura Districts. Four samples were at the maturing stage, and one sample, No.2, was at the flowering stage. Plant height ranged from 110cm to 155cm. Number of pods per plant was from 140 to 450. Stem color was either green or purple.

Two samples of mungbean (*Vigna radiata* Wilczek) called "kaha mung" or "mung" were collected in Matale and Moneragala Districts. Two samples of rice bean (*Vigna unguiculata* Ohwi et Ohashi) known as "boo mae" were collected in Badulla District. One sample of cowpea (*Vigna unguiculata* Walp, called "ratu") was collected in Matale District. A sample of horsegram (*Dolichos uniflorus* Lam., called "kollu") was also collected in Hambantota District.

c  **Recommendations for exploration and evaluation**

1 ) Millet germplasm has disappeared from farmers’ fields. However, as there are still a variety of valuable landraces in Naula, Kahatagasgiliya, Madirigiriya, and Wirawila, the exploration for collecting millet germplasm should be undertaken in these areas as soon as possible.

2 ) Some immature samples were collected. These samples seem to possess so poor germina-
bility that they should be handled carefully to maintain, evaluate, and multiply.

3 ) Yard grass plants ( *Eleusine indica* Gaertn.) were also found in the fields of finger millet. These wild species should be collected and evaluated to utilize for the breeding program and evolutionary research of finger millet.

4 ) Collection of millet germplasm was conducted from the low land to the semi-high land. The samples will show high variation of ecological characteristics such as growth period.

2. Joint exploration in Thailand

a) Method

Local markets were visited and some agricultural extension officers were interviewed to get the information on millets in Thailand.

One day tour for exploration was made four times from January 29th to February 1st in North Thailand by car. The route of exploration and the detailed itinerary are shown in Fig. 2 and Table 1, respectively.

b) Results and discussion

Seventeen samples consisting of 8 samples of maize, 6 of sorghum and 3 of the other crops were collected in villages including those of hill tribes, Karen and Lisu (Table 2).

A village named Copabong, 30km northwest from Chiang Dao, was visited on January 29th. The village people used to cultivate millet until 50 years ago, then it has been replaced by rice, maize, pepper and garlic. Even at Lisu tribe's village, nobody knew millet. Millets are not cultivated around Chiang Dao area according to hearing from the people at a local market in Chiang Dao.

Two sorghum samples were collected from a farmer at the village named Huang Pong, 75km northeast from Chiang Mai, in the way to Phayao. Sorghum was called "khao phan" or "khao tog". One was white seeded type produced as the feed for pigs, and the other was black seeded type with sweet stalk. Plant height of both samples ranged from 210cm to 220cm.

Southwestern part of Chiang Mai was explored on January 31st. Five samples of maize, one of sorghum, and one of finger millet were collected at the village named Ban Khun Krang in the Doi Inthanon National Park, 60km southwest from Chaing Mai. Samples of maize called "tien" were collected from ears which were air-dried after harvest. The ears varied from each other in kernel color, ear length and waxiness. The ears were boiled like sweet corn in Japan. "Tien dam" and "tien lueng" means black and yellow maize, respectively. One sample, No.95, was separated into two types, No. 95 and No. 105, according to the waxiness of seeds. Sorghum seeds were distilled into spirits. Finger millet with 6 long fingers was harvester in the last rainy season and stocked. It is called "khao phang teen mah". Well ripen panicles of finger
Fig. 2 The exploration routes in Thailand

タイにおける探索ルート
Table 2  Crop species and number of collections in Sri Lanka and Thailand

<table>
<thead>
<tr>
<th>Country &amp; Locality</th>
<th>Eleusine coracana</th>
<th>Setaria italica</th>
<th>Panicum milaceum</th>
<th>Sorghum bicolor</th>
<th>Zea mays</th>
<th>other species *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sri Lanka</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matale</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Polonnaruwa</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Anuradhapura</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Kuruganella</td>
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<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
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<td>Kandy</td>
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<td>1</td>
<td>0</td>
<td>0</td>
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<td>Badulla</td>
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<td>8</td>
<td>2</td>
<td>2</td>
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<td>2</td>
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<td>Moneragala</td>
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<td>0</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Hambantota</td>
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<td>3</td>
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<td>0</td>
<td>1</td>
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<td>Thailand</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chiang Mai</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Chiang Rai</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>48</strong></td>
<td><strong>23</strong></td>
<td><strong>6</strong></td>
<td><strong>8</strong></td>
<td><strong>9</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Notes: * other species (species name and collections number: *Brassica juncea* 5, *Vigna radiata* 2, *Vigna umbellata* 2, *Vigna sinensis* 1, *Dolichos uniflorus* 1, *Amaranthus caudatus* 1.)

Millet were popped in the fire and were used in the ceremony. Proso millet was cultivated two years ago, but no farmer maintained his own seeds.

Two samples of sorghum and one of foxtail millet were collected at Ban Pa Pung, a Karen's village, 137km from Chiang Mai. Sorghum called "khao phan" was about 300cm in plant height. Foxtail millet was called "khao phan hang mah" meaning dog's tail cereal. Grains of foxtail millet were steamed to cook.

One sample of sorghum and of grain amaranthus were collected at Ban Rom Pong, on the road side between Mae Cham and Hot.

Mon tribe's village was explored on February 1st at Doi Pui, very near the Doi Sathep, about 20km from Chiang Mai and two samples of maize were collected.

**c) Recommendations for exploration**

Millet germplasm have disappeared from farmers' fields around Chiang Mai, Chaing Dao, and Phayao. Millet will be lost in Doi Inthanon, Mae Chaem, Hot and Cham Thong within a few years. In the next exploration to the Northern Thailand, it is recommended that the northwest-
ern area around Mae Hong Son province where Karen people live, the northern area around Chiang Rai where Laifu tribe live, and the northeastern area around Nan province where Lisu tribe live should be explored for collecting millets.

4. Acknowledgements

We would like to thank all the farmers, extension officers and agricultural instructors, whom we met during the exploration trips for their sincere cooperation and willingness to provide us their seeds and share their time.

We also wish to express our sincere gratitude to the following persons:

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in Japan: Dr. K. Kawaguchi and Dr. K. Okuno, NIAR.

5. Literature cited


スリランカ及びタイにおける雑穀類遺伝資源の探索

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5)タイ チェンマイ畑作研究センター

要約

雑穀類は、イネ、ムギ等のような多量生産を行う穀類以外を総称している言葉である。今回
の探索収集では、禾穀類の中の小粒作物（アワ、キビ、ヒエ等、ミレットと言われる）を中心に、
モロコシ、トウモロコシ等も収集した。ミレットは、古くからユーラシア大陸またはアフリ
カ大陸において広く栽培され、受け継がれてきたが、近年、生産性や収益性の高い作物に置き
代わり、急速に耕地から姿を消しつつある。今回は、特にインドを中心としていまなお広く栽
培されているシコクビエ、アワ等のミレットを中心に、数種類の雑穀類をスリランカ及びタイ
北部から収集した。収集した系統のほとんどは各地域の農家において古くから栽培されてきた
在来種である。

本探索により、48点のシコクビエ（Eleusine coracana）、23点のアワ（Setaria italica）、6点
のキビ（Panicum miliaceum）、8点のモロコシ（Sorghum bicolor）、9点のトウモロコシ（Zea mays）
を収集した。また、ミレットとの混作作物や隣接した畑の作物も一部収集した。全収集数は
106点で、そのうち89点はスリランカで、17点はタイで収集した。

中部及び南部スリランカにおいて、標高0 mから約2,000 mの地域を延べ1,475 kmに渡り
探索し、作物の生育データと共に種子を収集した。スリランカにおいては、植物遺伝資源セン
ターが独自に探索収集を行っていたので、同センターの収集リストを照合し、探索集落に重複
を生じないように配慮した。シコクビエは乾燥・半乾燥地帯の栽培の他において広く栽培されて
いた。収集したサンプルには穂の形や大きさ、節の色等に変異が認められた。混作が多く、混
作作物にはアワ、ナラ等種々であった。キビの栽培を見かけることは非常に少なく、主として
農家の保存種子の分譲を受けた。豆類等隣接畑から収集したものもあった。シコクビエはいわ
ゆる“うす焼き”あるいはペースト状にして食べるということであった。アワはお粥として食
べるのが一般的なようであった。農家は雑穀、野菜等の作物の種子をよく保存しており、古く
から集落に伝わる在来種が多かった。スリランカには今回を含めても未収集地域が多くあり、
今後とも収集が必要である。

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北部タイにおいてはミレットの食用としての栽培は急減していた。作期ではないこともあってか、栽培畑に巡り会うことはなかった。小数部族の集落を訪ね、農家が保存している穂や乾燥中の穂から種子を収集した。収集物はモロコシ、トウモロコシがほとんどであった。北部タイのミレット収集を計画する場合、北西部のカレン族、北東部のリス族等が住む、より深い山岳地帯に足を踏み入れる必要があると考えられた。
<table>
<thead>
<tr>
<th>Collection No.</th>
<th>Date</th>
<th>Genus &amp; Species</th>
<th>Cultivar or local name</th>
<th>Sample Size</th>
<th>Status</th>
<th>Locality(Prov., Vill., km) &amp; Altitude(m)</th>
<th>Crop season</th>
<th>Cultural practice</th>
<th>Topography</th>
<th>Drainage</th>
<th>Characteristics of the Crops, Gained on the Fields</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkkan</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Elukwella, 6 km from Sigiriya, 140m</td>
<td>maha, early ripening</td>
<td>plain</td>
<td>level</td>
<td>moderate</td>
<td>plant height(h): 7:90 cm, panicle length(l): 7:75 cm</td>
<td>Vasanthi Sandenaka, Elukwella, Sigiriya for propagation</td>
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<td>11/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkkan</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Karanivilahan, 25 km from Naula</td>
<td>maha</td>
<td>m.c.</td>
<td>d.s.</td>
<td>flour, roti</td>
<td>☆☆ plant h.: 120 cm, panicle l.: 1:3-4 cm</td>
<td>H.N.W. Samaral, Karanivilahan, Naula</td>
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<tr>
<td>9</td>
<td>11/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkkan</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Karanivilahan, 25 km from Naula</td>
<td>maha</td>
<td>d.s.</td>
<td>s.c.</td>
<td>roti, paste</td>
<td>☆☆☆ plant h.: 90 cm, panicle l.: 1:3-4 cm</td>
<td>B.G. Podibanda, Karanivilahan, Naula</td>
</tr>
<tr>
<td>12</td>
<td>12/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkkan or kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Polonnaruwa, Mahatalakolavewa, 25 km from Medirigiriya, 0m</td>
<td>maha, early ripening</td>
<td>d.s.</td>
<td>roti, paste</td>
<td>hilly</td>
<td>moderate</td>
<td>seed co.: white, plant h.: 90 cm, panicle l.: 1:5 cm</td>
</tr>
<tr>
<td>14</td>
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<td>kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Polonnaruwa, Mahatalakolavewa, 25 km from Medirigiriya, 0m</td>
<td>maha</td>
<td>s.c.</td>
<td>d.s.</td>
<td>s.c.</td>
<td>level</td>
<td>good</td>
</tr>
<tr>
<td>15</td>
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<td>Eleusine coracana</td>
<td>kurakkkan</td>
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<td>landrace</td>
<td>Polonnaruwa, Mahatalakolavewa, 25 km from Medirigiriya, 0m</td>
<td>maha, early ripening</td>
<td>d.s.</td>
<td>s.c.</td>
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<td>S.K. Pyasea, Migagama, Medirigiriya</td>
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<td>kurakkkan</td>
<td>P</td>
<td>landrace</td>
<td>Polonnaruwa, Mahatalakolavewa, 9.6 km from Medirigiriya, MARKET</td>
<td>maha</td>
<td>d.s.</td>
<td>s.c.</td>
<td>transplanting</td>
<td>☆☆☆ plant h.: 90 cm, panicle l.: 1:5 cm</td>
<td>H.M. Tikiri-handa, Yaya 7, No.130, Pulayar Junction</td>
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<tr>
<td>20</td>
<td>13/Jan</td>
<td>Eleusine coracana</td>
<td>tummus kurakkkan</td>
<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ipolugama, 13 km from Kekirawa, 60 m</td>
<td>maha, harvest after 10 d</td>
<td>plain</td>
<td>slope</td>
<td></td>
<td>nod co.: normal green, plant h.: 130 cm, finger number (n): 9:10</td>
<td>K.A. Sraweero, Nelligyana, Ipolugama</td>
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<tr>
<td>21</td>
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<td>tummus kurakkkan</td>
<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ipolugama, 13 km from Kekirawa, 60 m</td>
<td>maha, harvest after 10 d</td>
<td>plain</td>
<td>slope</td>
<td></td>
<td>purple nod, plant h.: 130 cm, finger n.: 9:10</td>
<td>K.A. Sraweero, Nelligyana, Ipolugama</td>
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<tr>
<td>22</td>
<td>13/Jan</td>
<td>Eleusine coracana</td>
<td>tummus kurakkkan</td>
<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ipolugama, 13 km from Kekirawa, 60 m</td>
<td>maha, harvest after 10 d</td>
<td>plain</td>
<td>slope</td>
<td></td>
<td>closed finger, plant h.: 108 cm, finger n.: 5:10</td>
<td>K.A. Sraweero, Nelligyana, Ipolugama</td>
</tr>
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<tr>
<td>23</td>
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<td>Eleusine coracana</td>
<td>kurakkam</td>
<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ippulogama, 13km from Ke</td>
<td>maha, harvest after 10d</td>
<td>plain slope</td>
<td>opened finger, plant h.: 119cm, panicle l.: 5.5-6.0cm, finger n.: 5</td>
<td>K.A. Sraweera, Nelliyanagama, Ippulogama</td>
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<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ippulogama, 6km</td>
<td>maha, mature</td>
<td>plain slope</td>
<td>white and purple anther, plant h.: 106cm,</td>
<td>D.B. Siripala, Kadiyangavala, Ippulogama</td>
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<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ippulogama, 110m</td>
<td>maha</td>
<td>plain level</td>
<td>good big finger, plant h.: 127cm, panicle l.: 9cm, finger n.: 9</td>
<td>N.M.S. Ginadase, Matchagama, Ippulogama</td>
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<td>29</td>
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<td>Eleusine coracana</td>
<td>kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ippulogama, 110m</td>
<td>maha, mature</td>
<td>plain level</td>
<td>good small ear, plant h.: 86 cm, panicle l.: 4.5cm, finger n.: 5</td>
<td>N.M.S. Ginadase, Matchagama, Ippulogama</td>
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<td>Eleusine coracana</td>
<td>kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ahbaga-havewa, 2.5km from K</td>
<td>maha, harvest in Jan.</td>
<td>d.s.</td>
<td>m.c.(mustard)</td>
<td>good normal, light green stem, plant h.: 122cm, panicle l.: 7.5cm</td>
<td>S. Steven, Ahbaga-havewa, Kahatagasagiriya</td>
<td></td>
<td></td>
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<tr>
<td>32</td>
<td>14/Jan</td>
<td>Eleusine coracana</td>
<td>kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ahbaga-havewa, 2.5km from K</td>
<td>maha, harvest in Jan.</td>
<td>d.s.</td>
<td>m.c.(mustard)</td>
<td>good purple nod and purple anther, plant h.: 122cm, finger n.: 4</td>
<td>S. Steven, Ahbaga-havewa, Kahatagasagiriya</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>14/Jan</td>
<td>Eleusine coracana</td>
<td>kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ahbaga-havewa, 2.5km from K</td>
<td>maha, harvest in Jan.</td>
<td>d.s.</td>
<td>m.c.(mustard)</td>
<td>good short plant height and few finger, plant h.: 96cm, finger n.: 2</td>
<td>S. Steven, Ahbaga-havewa, Kahatagasagiriya</td>
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<tr>
<td>35</td>
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<td>Eleusine coracana</td>
<td>kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Anuradhapura, Ahbaga-havewa, 2.5km from K</td>
<td>maha, harvest in Jan.</td>
<td>d.s.</td>
<td>m.c.(mustard)</td>
<td>good branching stem, plant h.: 93cm, panicle l.: 2cm, finger n.: 7</td>
<td>S. Steven, Ahbaga-havewa, Kahatagasagiriya</td>
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<tr>
<td>37</td>
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<td>Eleusine coracana</td>
<td>kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Kurunegala, Mahagalkadawala, 13km from Galgamuva, 30m</td>
<td>maha, harvest in Jan.</td>
<td>d.s., m.c.</td>
<td>undulating level</td>
<td>good big finger, plant h.: 94 cm, panicle l.: 6.5cm, finger n.: 7</td>
<td>D.M. Kiriwanda, No. 4, Madagama, Mahagalkadawala, Galgamuva</td>
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<td>38</td>
<td>15/Jan</td>
<td>Eleusine coracana</td>
<td>kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Kurunegala, Mahagalkadawala, 13km from Galgamuva, 30m</td>
<td>maha, harvest in Jan.</td>
<td>d.s., m.c.</td>
<td>undulating level</td>
<td>good 4 finger, plant h.: 62cm, panicle l.: 4.5cm, nod color: light green</td>
<td>D.M. Kiriwanda, No. 4, Madagama, Mahagalkadawala, Galgamuva</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<th>Site Drainage</th>
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<td><em>Eleusine coracana</em></td>
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<td>P</td>
<td>landrace</td>
<td>Kurunegala, Mahagala-kadawila, 13km from Galgamuwa, 30m</td>
<td>maha, harvest in Jan.</td>
<td>undulating</td>
<td>lev</td>
<td>good</td>
<td>5 finger type, plant h.: 79cm, panicle l.: 5.5cm, nod co.: green</td>
<td>D.M.Kiribanda, No.4, Madagama, Mahagalkadawila, Galgamuwa</td>
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<td>P</td>
<td>uncertain</td>
<td>Kuruganella, Gojaragama, 3km from Galgamuwa, 65m</td>
<td>maha, harvest in Jan.</td>
<td>high yield</td>
<td>plain</td>
<td>lev</td>
<td>big and high yield type, plant h.: 125cm, panicle l.: 5.5cm, finger:9</td>
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<td>Kuruganella, Gojaragama, 3km from Galgamuwa, 65m</td>
<td>maha, harvest in Jan.</td>
<td>high yield</td>
<td>plain</td>
<td>lev</td>
<td>the lowest finger split type, plant h.: 112cm, panicle l.: 1.8cm</td>
<td>K.Kadiravalu, Gojaragama</td>
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<td>uncertain</td>
<td>Kuruganella, Gojaragama, 3km from Galgamuwa, 65m</td>
<td>maha, harvest in Jan.</td>
<td>high yield</td>
<td>plain</td>
<td>lev</td>
<td>purple nod and glume, plant h.: 85cm, panicle l.: 1.5.5cm, finger n:7</td>
<td>K.Kadiravalu, Gojaragama</td>
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<td>45</td>
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<td><em>Eleusine coracana</em></td>
<td>kalugal kurahan</td>
<td>P</td>
<td>landrace</td>
<td>Kandy, Dasabagahapitiya, 6km from Udumbara, 500m</td>
<td>maha, harvest 15/Jan</td>
<td>m.c. pit rotty</td>
<td>mountaineous</td>
<td>slow</td>
<td>early ripening type, plant h.: 80cm, panicle l.: 1.5.5cm, finger n:5</td>
<td>G.K.C.Premenadasa, Dasabagahapitiya, Kaduraliyadda</td>
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<td><em>Eleusine coracana</em></td>
<td>kurakkan</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Kototheke, Z2ka from Mahiyangana, 120m</td>
<td>maha, not earing</td>
<td>m.c. (corn)</td>
<td>undulating</td>
<td>lev</td>
<td>good</td>
<td>*plant h.: 90cm</td>
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<td>48</td>
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<td><em>Eleusine coracana</em></td>
<td>kiri kurakkan</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Daabana, 21 km from Mahiyangana</td>
<td>maha, harvest in Jan.</td>
<td>m.c. (corn)</td>
<td>undulating</td>
<td>lev</td>
<td>good</td>
<td>White seed type, plant h.: 50-60cm, panicle l.: 3.5-4cm, finger n.:3-5</td>
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<td>kiri kurakkan</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Daabana, 21 km from Mahiyangana</td>
<td>maha, harvest in Jan.</td>
<td>m.c. (corn)</td>
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<td>lev</td>
<td>good</td>
<td>purple glume, plant h.: 50-80cm, panicle l.: 3-4.5cm, finger n.:7-4</td>
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<td>kaku kurakkan</td>
<td>P</td>
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<td>Badulla, Daabana, 21 km from Mahiyangana</td>
<td>maha, harvest in Feb.</td>
<td>m.c. (famil etc.)</td>
<td>undulating</td>
<td>lev</td>
<td>good</td>
<td>plant h.: 90cm, panicle l.: 1.4-5cm, finger n.:4-6</td>
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<td>kiri kurakkan</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Daabana, 21 km from Mahiyangana, 90m</td>
<td>maha, harvest in Jan.</td>
<td>m.c. (aba)</td>
<td>plain</td>
<td>slope</td>
<td>good</td>
<td>white glume, plant h.: 60cm, panicle l.: 1.3-4.5cm, finger n.:4-5</td>
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<th>Cultural practice</th>
<th>Topography</th>
<th>Drainage</th>
<th>Site</th>
<th>Characteristics of the Crops, Gained on the Fields</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>54</td>
<td>18/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkam</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Daabana, 18 km from Mahiyangana MARKET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>seed c. grayish brown, received from farmers in Daabana</td>
<td>Jayasinghe, Daabana, Mahiyangana, road side</td>
</tr>
<tr>
<td>55</td>
<td>18/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkam</td>
<td>In</td>
<td>landrace</td>
<td>Badulla, Gadaguduwewa 13km from Mahiyangana, 55m</td>
<td>maha</td>
<td>m.c.</td>
<td>plain level</td>
<td></td>
<td></td>
<td>plant h.:132cm, finger n.:6, maybe one plant, growing independently</td>
<td>D.M. Mtubanda, No.302 Gadaguduwewa, Mahiyangana, Bible road</td>
</tr>
<tr>
<td>57</td>
<td>18/Jan</td>
<td>Eleusine coracana</td>
<td>balaa kurakkam</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Polwatta, 14km from Mahiyangana, 55m</td>
<td>maha</td>
<td></td>
<td>good</td>
<td></td>
<td></td>
<td>early ripening type, plant h.:105cm, panicle l.:1.4-5cm, finger n.:2-5</td>
<td>L.A.M. Punchibanda, 15 mile post Polwatta, Uruyana</td>
</tr>
<tr>
<td>58</td>
<td>18/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkam</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Unit 40/2, 34km from Badulla, 95m</td>
<td>maha, harvest in Jan.</td>
<td>m.c. (corn or sorghum)</td>
<td>mountainous</td>
<td>slope moderate</td>
<td></td>
<td>plant h.:114cm, panicle l.:1.5-5cm, finger n.:5-8</td>
<td>D.M. Heenbanda, Unit 40/2, Badulla Oya</td>
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<tr>
<td>61</td>
<td>18/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkam</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Karameyia, 30km from Badulla, 80m</td>
<td>m.c. (corn)</td>
<td>harvest in Dec.</td>
<td>mountainous</td>
<td>slope good</td>
<td></td>
<td>plant h.:105cm, panicle l.:1.45cm</td>
<td>G.M. Sudubanda, 27/2 Karameyia, Badulla Oya</td>
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<tr>
<td>62</td>
<td>19/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkam (bulk)</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Hakurakudawa, 24km from Badulla, 250m</td>
<td>maha</td>
<td>m.c. (corn)</td>
<td>hilly slope</td>
<td>good</td>
<td></td>
<td>89 days ripening type, plant h.:104cm, panicle l.:1.5cm, finger n.:5</td>
<td>Y.R.M. Aranda Royapaka, Hakurakudawa, Migahakiula</td>
</tr>
<tr>
<td>63</td>
<td>19/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkam (bulk)</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Hakurakudawa, 24km from Badulla, 250m</td>
<td>maha</td>
<td>m.c. (corn)</td>
<td>hilly slope</td>
<td>good</td>
<td></td>
<td>purple nod, plant h.:110cm, panicle l.:1.45 cm, finger n.:6</td>
<td>Y.R.M. Aranda Royapaka, Hakurakudawa, Migahakiula</td>
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<tr>
<td>67</td>
<td>19/Jan</td>
<td>Eleusine coracana</td>
<td>kiri kurakkam</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Taldena, 14km from Badulla, 250m</td>
<td>maha, harvest in Jan.</td>
<td>m.c. (corn)</td>
<td>hilly steep</td>
<td></td>
<td>plant h.:50cm</td>
<td>K.R.S.M. Gunthy, Taldena, Boiyadda, Ketawelagedera</td>
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<td>71</td>
<td>19/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkam</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Hakurakudawa, 24km from Badulla, 250m</td>
<td>maha</td>
<td>m.c. (corn)</td>
<td>hilly slope</td>
<td></td>
<td></td>
<td>Y.R.M. Aranda Royapaka, Hakurakudawa, Migahakiula</td>
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<tr>
<td>73</td>
<td>19/Jan</td>
<td>Eleusine coracana</td>
<td>Kurakkam</td>
<td>P</td>
<td>uncertain</td>
<td>Badulla, Passara road, MARKET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A.B. David Silva, No.75, Main street, Passara, TE1055-8707</td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1) Sample: P=population, In=individual 2) Status: wild, weedy, landrace, improved, breeder's line, others. 3) Topography: flood, plain, level, undulating, hilly, mountainous, others. 4) Site: level, slope, summit, depression. 5) Drainage: poor, moderate, good, excessive. 6) "\(\star\)" means data from hearing on the fields. 7) Abbreviation: h. height, l. length, n. number, co. color, s. stage, d. day, m.c. mixed cropping, d.s. direct saving, s.c. shifting cropping, m"" means "not clearly"
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<thead>
<tr>
<th>Collection No.</th>
<th>Date</th>
<th>Genus &amp; Species</th>
<th>Cultivar or local name</th>
<th>Sample P/ln</th>
<th>2) Status</th>
<th>3) Locality(Frov., Vill., km) &amp; Altitude(m)</th>
<th>Crop season</th>
<th>Cultural practice</th>
<th>Usage</th>
<th>Topography</th>
<th>4) Site Drainage</th>
<th>Characteristics of the Crops, Gained on the Fields</th>
<th>Notes Name &amp; address etc.</th>
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<tbody>
<tr>
<td>75</td>
<td>20/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkkan P</td>
<td>landrace</td>
<td>Moneragala, Galakulugolla, 9km from Passara, 200m</td>
<td>maha, harvest in Jan.</td>
<td>maha, harvest in Jan.</td>
<td>mountainous slope</td>
<td>good</td>
<td>plant h: 192cm, panicle 1.8cm, finger n: 14</td>
<td>R.M. Jayarathne, Galakulugolla, Kotalamuduna, Passara</td>
<td></td>
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</tr>
<tr>
<td>76</td>
<td>20/Jan</td>
<td>Eleusine coracana</td>
<td>kurakkkan P</td>
<td>landrace</td>
<td>Moneragala, Galakulugolla, 9km from Passara, 300m</td>
<td>maha, harvest in Jan.</td>
<td>maha, harvest in Jan.</td>
<td>mountainous slope</td>
<td>good</td>
<td>purple nod, plant h: 69cm, panicle 1.15cm, finger n: 5</td>
<td>R.M. Jayarathne, Galakulugolla, Kotalamuduna, Passara</td>
<td></td>
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<tr>
<td>78</td>
<td>20/Jan</td>
<td>Eleusine coracana</td>
<td>maha kurakkkan P</td>
<td>landrace</td>
<td>Moneragala, Peraketiya, 8km from Pelwatta, 150m</td>
<td>maha, harvest in Jan.</td>
<td>maha, harvest in Jan.</td>
<td>mono culture</td>
<td>undulating slope</td>
<td>early ripening type, plant h: 30cm, panicle 1.7-8cm, finger n: 7</td>
<td>A.M. Karunarathne, Peraketiya, Udarawa, Uva Pelwatta</td>
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<td></td>
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<tr>
<td>79</td>
<td>20/Jan</td>
<td>Eleusine coracana</td>
<td>maha kurakkkan P</td>
<td>landrace</td>
<td>Moneragala, Peraketiya, 8km from Pelwatta, 150m</td>
<td>maha, harvest in Jan.</td>
<td>maha, harvest in Jan.</td>
<td>m.c., de-weeding 2 times</td>
<td>undulating slope</td>
<td>good</td>
<td>plant h: 125cm, finger n: 3</td>
<td>V.M. Canarabanda, Peraketiya, Udarawa, Uva Pelwatta</td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>20/Jan</td>
<td>Eleusine coracana</td>
<td>loku kurakkkan P</td>
<td>landrace</td>
<td>Hambantota, Kudagama, 8km from Tissamaharama, 40km</td>
<td>maha bad status</td>
<td>maha bad status</td>
<td>plain slope</td>
<td>plant h: 110cm, panicle 1.4-5cm, finger n: 16-7</td>
<td>R.P. Dayadasa, Kudagama, 8 left bank, Kirindi Oya Project</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>21/Jan</td>
<td>Eleusine coracana</td>
<td>lal kurakkkan P</td>
<td>landrace</td>
<td>Hambantota, No.44, New Town, 8cm from Hirawa, 8m</td>
<td>maha, harvest in Jan.</td>
<td>maha, harvest in Jan.</td>
<td>m.c. (legume)</td>
<td>plain level</td>
<td>good</td>
<td>much lodging, plant h: 93cm, panicle 1.5-5.5cm, finger n: 5.5-6</td>
<td>S.D. Kulatunge, No.44 New Town, Wirawila, Wellawaye road</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>21/Jan</td>
<td>Eleusine coracana</td>
<td>kiri kurakkkan P</td>
<td>landrace</td>
<td>Hambantota, Beliatamkade, 6km from Tamamahwila, 0.5m</td>
<td>maha, harvest in Jan.</td>
<td>maha, harvest in Jan.</td>
<td>mono culture</td>
<td>plain level</td>
<td>purple nod, lately ripening type, plant h: 10cm, panicle 1.6-7cm, finger n: 16-7</td>
<td>K.A. Danapala, Beliatamkade, Dega-debira, Gohiraya</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>98</strong></td>
<td>31/Jan</td>
<td>Eleusine coracana</td>
<td>khao paing teen msh</td>
<td>landrace</td>
<td>Chiang Mai, Ban Khun Krang, 60km from Chiang Mai, 1200m</td>
<td>rainy season</td>
<td>hill planting</td>
<td>eatee like popcorn</td>
<td>mountainous slope</td>
<td>good</td>
<td>plant h: 110cm, panicle 1.1cm, finger n: 6</td>
<td>Pai (Moors hill tribe) Ban Khun Krang Doi Intanong</td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1) Sample: P = population, In = individual. 2) Status: wild, weedy, landrace, improved, breeder's line, others. 3) Topography: swamp, flood plain, plain level, undulating, hilly, mountainous, others. 4) Site: level, slope, summit, depression. 5) Drainage: poor, moderate, good, excessive. 6) * means data from hearing on the fields. 7) Abbreviation: h: height, l: length, n: number, c.o. color, s. stage, d. day, m.c. mixed cropping, d.s. direct sawing, s.c. shifting cropping. 8) ** means not clearly. 9) * means collection in Thailand, no marks in Sri Lanka.
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<tr>
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<tbody>
<tr>
<td>4</td>
<td>11/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Elukwella, 6km from Sigiriya, 140m</td>
<td></td>
<td></td>
<td>plain</td>
<td>level</td>
<td>seed and bristle co.: redish and brown, panicle l=11cm</td>
<td>Vasantha Sandenayaka, Elukwella, Sigiriya</td>
</tr>
<tr>
<td>8</td>
<td>11/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Karanwilahe, 5km from Naula, maha</td>
<td></td>
<td></td>
<td></td>
<td>slope</td>
<td>seed and bristle co.: yellow, long ear, panicle l=20cm</td>
<td>H.N.V.Samararatna, Karanwilahe, Naula</td>
</tr>
<tr>
<td>10</td>
<td>11/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Karanwilahe, 2km from Naula,</td>
<td></td>
<td></td>
<td></td>
<td>slope</td>
<td>seed and bristle co.: whitish and yellow, panicle l=7.5cm</td>
<td>B.G.Podibanda, Karanwilahe, Naula</td>
</tr>
<tr>
<td>11</td>
<td>11/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Karanwilahe, 2km from Naula, maha</td>
<td>harvest in Jan</td>
<td></td>
<td></td>
<td></td>
<td>plant h=150cm, panicle l=7.5cm</td>
<td>Mathumanike, N.M.U., Karanwilahe, Naula</td>
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<td>12</td>
<td>12/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Polonnaruwa, Mahatatalakovena, 22km from Madirigiriya, 16m</td>
<td>maha</td>
<td>like</td>
<td>plant h=102cm, panicle l=14cm, stem l=132cm, cm leaf</td>
<td>K.K. Yasuoka, Migawa, Madirigiriya</td>
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<tr>
<td>13</td>
<td>13/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Anuradapura, Ippoolagama, 13km from Ke- kirawa, 60m</td>
<td></td>
<td></td>
<td>plain</td>
<td>slope</td>
<td>clearly lobed type, big ear, panicle l=16cm</td>
<td>K.A. Srawero, Nelliya, Ippoolagama</td>
</tr>
<tr>
<td>14</td>
<td>13/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Anuradapura, Ippoolagama, 13km from Ke- kirawa, 60m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>not clearly lobed type, compacted small ear, panicle l=11cm</td>
<td>K.A. Srawero, Nelliya, Ippoolagama</td>
</tr>
<tr>
<td>15</td>
<td>14/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Anuradapura, Ambagavewa, 13km from Ke- kirawa, 60m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>clear ear type, plant h=180cm, panicle l=21-22cm</td>
<td>V.M. Jayasinghe, Nelliya, Ippoolagama</td>
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<td>16</td>
<td>15/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Anuradapura, Ambagavewa, 13km from Ke- kirawa, 60m</td>
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<td></td>
<td></td>
<td></td>
<td>clearly lobed ear, glume co: brown, plant h=12cm, stem l=130cm</td>
<td>M. Narasimam, Ambagavewa, 13km from Ke-kirawa, 60m</td>
</tr>
<tr>
<td>17</td>
<td>15/Jan</td>
<td>Setaria italica</td>
<td>Tanahal</td>
<td>P</td>
<td>landrace</td>
<td>Kurungango, gojara, 3km from Galle, 65m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>clear ear, glume co: black, plant h=12cm, panicle l=21cm</td>
<td>K. Kadiyarathe, Gojara, 65m</td>
</tr>
</tbody>
</table>

Notes:
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<tr>
<td>44</td>
<td>15/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>landrace?</td>
<td>Karugama, Gojaragama, 3km from Galsukka, 65m</td>
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<td></td>
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<td>glume co.: brownish, plant h.: 161cm, stem l.: 100cm, panicle l.: 21cm</td>
<td>K. Kadiriravalu, Gojaragama</td>
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<td>46</td>
<td>15/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>landrace?</td>
<td>Kandy, Dambagahapitiya, MARKET</td>
<td></td>
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<td>A.F.M. Razeek, Dambagaha, Kahataliyadda</td>
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<tr>
<td>51</td>
<td>18/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>uncertain</td>
<td>Badulla, Dambara, 21 km from Mahiyangana</td>
<td></td>
<td>maha</td>
<td></td>
<td></td>
<td>glume co.: orange, panicle l.: 21cm</td>
<td>Gunerathne, Dambara, Mahiyangana, Watuaya</td>
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<td>56</td>
<td>18/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>landrace?</td>
<td>Badulla, Gadaguduwa, 13km from Mahiyangana</td>
<td>for four months</td>
<td></td>
<td></td>
<td></td>
<td>glume co.: blackish brown, plant h.: 118cm, panicle l.: 115cm</td>
<td>D.M. Nadubanda, No. 302 Gadaguduwa, Mahiyangana, Bibile road</td>
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<tr>
<td>59</td>
<td>19/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>landrace?</td>
<td>Badulla, Unit 40/2, 39km from Badulla, 95m</td>
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<td>glume co.: whitish brown, panicle l.: 121cm</td>
<td>D.M. Henebanda, Unit 40/2, Badulla Oya</td>
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<td>60</td>
<td>19/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>landrace?</td>
<td>Badulla, Karanetiya, 34km from Badulla, 80m</td>
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<td></td>
<td></td>
<td></td>
<td>good</td>
<td>G.M. Sadubanka, 2/7 Karatemiy, Badulla Oya</td>
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<tr>
<td>64</td>
<td>19/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>landrace?</td>
<td>Badulla, Hakurukaduwawa, 24km from Badulla, 250m</td>
<td></td>
<td>maha</td>
<td></td>
<td></td>
<td>hilly</td>
<td>Y.R.M. Aranda Royapanaka, Hakurukaduwa, Higahakuva</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>19/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>wild</td>
<td>Badulla, Hakurukaduwawa, 24km from Badulla, 250m</td>
<td></td>
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<td></td>
<td></td>
<td>wild type, plant h.: 200cm, panicle l.: 18cm</td>
<td>the roadside, near from collection No. 64</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>18/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>landrace?</td>
<td>Badulla, Taluda, 14km from Badulla, 250m</td>
<td></td>
<td>maha</td>
<td></td>
<td></td>
<td>seed co. has two types, black and yellow</td>
<td>D.M. Bandarama, Tambahangadeni, Boliyadda</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>20/J</td>
<td>Setaria italica</td>
<td>tanahal</td>
<td>P</td>
<td>uncertain</td>
<td>Badulla, Passara road, MARKET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>seed co.: brown</td>
<td>A.B. David Silva, No. 75, Main street, Passara, YE1055-8707</td>
<td></td>
</tr>
</tbody>
</table>

Notes
1) Sample: P = population, I = individual
2) Status: M = wild, W = weedy, L = landrace, I = improved, B = breeder's line, others.
3) Topography: S = swamp, F = flood, P = plain, L = undulating, H = hilly, M = mountainous, O = others.
4) Site: S = slope, P = summit, D = depression.
5) Drainage: P = poor, M = moderate, G = good, E = excessive.
6) "A" means data from the fields.
7) Abbreviation: H = height, L = length, N = number, C = color, S = stage, D = day, M = mixed cropping, D.S = direct sowing, S.C = shifting cropping, R = road.
8) "C" means "not clearly"
<table>
<thead>
<tr>
<th>Collection No.</th>
<th>Date</th>
<th>Genus &amp; Species</th>
<th>Cultivar or local name</th>
<th>Sample P/In</th>
<th>Status</th>
<th>Locality (Prov., Vill., km) &amp; Altitude (m)</th>
<th>Crop season</th>
<th>Cultural practice</th>
<th>Usage</th>
<th>Topography</th>
<th>Site</th>
<th>Drainage</th>
<th>Characteristics of the Crops, Gained on the Fields</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>20/Jan</td>
<td><em>Setaria italica</em></td>
<td>tana deal</td>
<td>P</td>
<td>landrace</td>
<td>Moneragala, Peraketiya, 8km from Pelwatta, 150m</td>
<td>maha, harvest 2 times</td>
<td>m.c., deseeding</td>
<td>undulating</td>
<td>slopy</td>
<td>good</td>
<td>plant h: 130cm, panicle l: 17cm</td>
<td>W.M. Ganarambnda, Peraketiya, Udarawa, Uwa Pelwatta</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>21/Jan</td>
<td><em>Setaria italica</em></td>
<td>tana deal</td>
<td>P</td>
<td>landrace</td>
<td>Hambantota, Biella, Thottakkod, 6km from Tanamalvila, 65m</td>
<td>maha, harvest in Jan.</td>
<td>plain</td>
<td>level</td>
<td>good</td>
<td>plant h: 100cm, panicle l: 18cm</td>
<td>K.A. Danapala, Biella, Thottakkod, Degele, Gohihiyena</td>
<td></td>
<td></td>
</tr>
<tr>
<td>★96</td>
<td>31/Jan</td>
<td><em>Setaria italica</em></td>
<td>khao pa mng hang mah(dog)</td>
<td>In</td>
<td>landrace</td>
<td>Chiang Mai, Ban Phung, 90km from Chiang Mai, 520m</td>
<td>rainy season</td>
<td>broadcasting</td>
<td>mountainous</td>
<td>slopy</td>
<td>good</td>
<td>plant h: 150cm, panicle l: 27cm</td>
<td>Yang Gong (Karen hill tribe), Tumboi Tapa, Maechau, Chiang Mai</td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1) Sample: P = population, In = individual 2) Status: Wild, weedy, landrace, improved, breeder's line, others. 3) Topography: swamp, flood plain, plain level, undulating, hilly, mountainous, others. 4) Site: level, slope, summit, depression. 5) Drainage: poor, moderate, good, excessive. 6) "★" means data from hearing on the fields. 7) Abbreviation: h. height, l. length, n. number, c. color, s. stage, d. day, m.c. mixed cropping, d.s. direct sowing, s.c. shifting cropping. 8) "?" means "not clearly" 9) "★" means collection in Thailand, no marks in Sri Lanka.
<table>
<thead>
<tr>
<th>Collection No.</th>
<th>Date Month</th>
<th>Genus &amp; Species</th>
<th>Cultivar or local name</th>
<th>Sample P/l</th>
<th>Status 1</th>
<th>Locality (Prov., Vill., &amp; Altitude)</th>
<th>Crop season</th>
<th>Cultural practice</th>
<th>Topography</th>
<th>Site</th>
<th>Characteristics of the Crops, Gained on the Fields</th>
<th>Notes Name &amp; address etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>11/Jun</td>
<td>Panicum miliace-um</td>
<td>mineri</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Elukkella, 6km from Sigiriya, 110m</td>
<td>maha, begin of ri.</td>
<td>d.s.</td>
<td>rice</td>
<td>level</td>
<td>seed co.: golden, not avn, plant h: 100cm, panicle 1.24cm</td>
<td>Vasantha Sandeysaka, Elukkella, Sigiria</td>
</tr>
<tr>
<td>72-a</td>
<td>20/Jun</td>
<td>Panicum miliace-um</td>
<td>mineri</td>
<td>P</td>
<td>uncertain</td>
<td>Badulla, Passara road, MARKET</td>
<td></td>
<td></td>
<td>rice</td>
<td>level</td>
<td>seed co.: brownish yellow</td>
<td>A.B. David Silva, No.75, Main street, Passara, TE005-8707</td>
</tr>
<tr>
<td>72-b</td>
<td>20/Jun</td>
<td>Panicum miliace-um</td>
<td>mineri</td>
<td>P</td>
<td>uncertain</td>
<td>Badulla, Passara road, MARKET</td>
<td></td>
<td></td>
<td>rice</td>
<td>level</td>
<td>seed co.: blackish yellow</td>
<td>A.B. David Silva, No.75, Main street, Passara, TE005-8707</td>
</tr>
<tr>
<td>83</td>
<td>20/Jun</td>
<td>Panicum miliace-um</td>
<td>mineri</td>
<td>P</td>
<td>uncertain</td>
<td>Hambantota, Kataragama, MARKET</td>
<td>yala, saving in April</td>
<td></td>
<td></td>
<td></td>
<td>seed produced in 1980</td>
<td>Ariya Wellandasella, Sella, Kataragama</td>
</tr>
<tr>
<td>87</td>
<td>21/Jun</td>
<td>Panicum miliace-um</td>
<td>mineri</td>
<td>P</td>
<td>landrace</td>
<td>Hambantota, Beliatakode, 6km from Tanamalville, 65m</td>
<td>yala, maha, too</td>
<td></td>
<td></td>
<td></td>
<td>seed mixed (yellow and gray)</td>
<td>K.A. Danapala, Beliatakode, Degaldhira, Gholihypeya</td>
</tr>
<tr>
<td>88</td>
<td>21/Jun</td>
<td>Panicum miliace-um</td>
<td>mineri</td>
<td>P</td>
<td>landrace</td>
<td>Hambantota, Beliatakode, 6km from Tanamalville, 65m</td>
<td>yala, maha, too</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K.A. Danapala, Beliatakode, Degaldhira, Gholihypeya</td>
</tr>
</tbody>
</table>

Notes 1) Sample: P = population, I = individual 2) Status: wild, weedy, landrace, improved, breeder’s line, others. 3) Topography: swamp, flood plain, plain level, undulating, hilly, mountainous, others. 4) Site: level, slope, summit, depression. 5) Drainage: poor, moderate, good, excessive. 6) "*" means data from hearing on the fields. 7) Abbreviation: h. height, l. length, n. number, co. color, s. stage, d. day, m.c. mixed cropping, d.s. direct saving, s.c. shifting cropping, r. road, ri. ripening. 8) "?" means "not clearly"
<table>
<thead>
<tr>
<th>Collection No.</th>
<th>Date</th>
<th>Genus &amp; Species</th>
<th>Cultivar or local name</th>
<th>Sample P/in²</th>
<th>Status</th>
<th>Locality (Prov., Vill., km) &amp; Altitude(m)</th>
<th>Crop season</th>
<th>Cultural practice</th>
<th>Topography</th>
<th>Drainage</th>
<th>Characteristics of the Crops, Gained on the Fields</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>18/Jan</td>
<td>Sorghum bicolor</td>
<td>vaguru P landrace</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Dambana, 21 km from Mahiyangana</td>
<td>undulating lev el</td>
<td>good seed co.: white, glume co.: blackish, panicle 1:13 cm</td>
<td>Gunerathne, Dambana, Mahiyangana, Watuwaya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>18/Jan</td>
<td>Sorghum bicolor</td>
<td>vaguru P landrace</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Hakurukudawa, 254 km from Badulla, 250 m</td>
<td>hilly slope</td>
<td>good seed co.: light brown, plant h.: 200-250 cm, panicle 1:25 cm</td>
<td>Y.R.M. Aranda Royanaka, Hakurukudawa, Migahakulu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>30/Jan</td>
<td>Sorghum bicolor</td>
<td>khao phan or khao tog P landrace</td>
<td>P</td>
<td>landrace</td>
<td>Chiang Rai, Ban Huang Pong, 75 km from Chiang Mai, 730 m</td>
<td>rainy season, V-X II</td>
<td>broad-ca, no fertilizer, mainly pig's feed,</td>
<td>sloping</td>
<td>good seed co.: white, plant h.: 210-220 cm, panicle 1:35 cm</td>
<td>Jatoa Jaka, Ban Huang-Pong, Mae-kachan, Chiang Rai</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>30/Jan</td>
<td>Sorghum bicolor</td>
<td>khao phan du(Lolo gui) P landrace</td>
<td>P</td>
<td>landrace</td>
<td>Chiang Rai, Ban Huang Pong, 75 km from Chiang Mai, 730 m</td>
<td>rainy season, V-X II</td>
<td>broad-ca, no fertilizer, chew, cow's feed,</td>
<td>mountainous</td>
<td>good seed co.: black, ²plant h.: 210-200, panicle 1:35 cm</td>
<td>Jatoa Jaka, Ban Huang-Pong, Mae-kachan, Chiang Rai</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>31/Jan</td>
<td>Sorghum bicolor</td>
<td>khao phan dum P landrace</td>
<td>P</td>
<td>landrace</td>
<td>Chiang Mai, Ban Khu-nKrang, 60 km from Chiang Mai, 1230 m</td>
<td>rainy season,</td>
<td>broad-ca, eat, chew, alcoholic</td>
<td>mountainous</td>
<td>good seed co.: brown, ²plant h.: 230 cm, panicle 1:31 cm</td>
<td>Pai (Mong hill tribe), Ban Khun Krang, Chomthong, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>31/Jan</td>
<td>Sorghum bicolor</td>
<td>khao phan dum P landrace</td>
<td>P</td>
<td>landrace</td>
<td>Chiang Mai, Ban Pa-pung, 90 km from Chiang Mai, 550 m</td>
<td>rainy season,</td>
<td>broad-ca, eat, chew, alcoholic</td>
<td>mountainous</td>
<td>good seed co.: brown, ²plant h.: 230 cm, panicle 1:37 cm</td>
<td>Yang Gong (Karen hill tr.), Ban Papung Tapa Mae-chan, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>31/Jan</td>
<td>Sorghum bicolor</td>
<td>khao phan dum P landrace</td>
<td>P</td>
<td>landrace</td>
<td>Chiang Mai, Ban Pa-pung, 90 km from Chiang Mai, 520 m</td>
<td>rainy season,</td>
<td>broad-ca, eat, chew, alcoholic</td>
<td>mountainous</td>
<td>good seed co.: reddish black, ²plant h.: 275 cm, panicle 1:26 cm</td>
<td>Pahair (Karen hill tr.), Tuobol Tapa, Mae-chan, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>101</td>
<td>31/Jan</td>
<td>Sorghum bicolor</td>
<td>khao phan dum P landrace</td>
<td>P</td>
<td>landrace</td>
<td>Chiang Mai, Ban Long Pong, 110 km from Chiang Mai, 820 m</td>
<td>rainy season,</td>
<td>broad-ca, eat, chew, alcoholic</td>
<td>undulating level</td>
<td>plant h.: 230 cm, panicle 1:45 cm</td>
<td>Huvang, Ban Long Pong, Mae-chan, Chiang Mai</td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1) Sample: P=population, in=individual 2) Status: wild, weedy, landrace, improved, breeder's line, others. 3) Topography: swamp, flood plain, plain level, undulating, hilly, mountainous, others. 4) Site: level, slope, summit, depression. 5) Drainage: poor, moderate, good, excessive. 6) "²" means data from hearing on the fields. 7) Abbreviation: h. height, l. length, n. number, co. color, s. stage, d. day, m.c. mixed cropping, d.s. direct sowing, s.c. shifting cropping, broad-ca broad-cutting, chew. chewing. 8) "*" means "not clearly" 9) "★" means collection in Thailand, no mark's in Sri Lanka.
<table>
<thead>
<tr>
<th>Collection No.</th>
<th>Date &amp; Month</th>
<th>Genus &amp; Species</th>
<th>Cultivar or local name</th>
<th>Sample P/P'ln?</th>
<th>Status</th>
<th>Locality (prov., vill., km) &amp; Altitude(m)</th>
<th>Crop season</th>
<th>Cultural practice</th>
<th>Usage</th>
<th>Topography</th>
<th>Drawing Site</th>
<th>Characteristics of the Crops, Gained on the Fields</th>
<th>Notes Name &amp; address etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>12/Jan</td>
<td>Zea mays</td>
<td>Hewati-bada irigus</td>
<td>In landrace</td>
<td></td>
<td>Polonnaruwa, Mahottalakotalawa, 20km from Madirigiria, On 4 months</td>
<td>boiled and eaten</td>
<td>plain</td>
<td>seed coat: light purple, flint, plant h.: 140 cm, panicle l.: 16 cm</td>
<td>K.K. Yasuda, Migawanna, Medirigiriya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31/Jan</td>
<td></td>
<td>Zea mays</td>
<td>Tien dang (red)</td>
<td>P landrace</td>
<td></td>
<td>Chiang Mai, Ban Khun Krang, 60m from Chiang Mai, 1230m</td>
<td>rainy season, VI-X</td>
<td>hill planting</td>
<td>boiled and eaten</td>
<td>moutainous slope</td>
<td>good seed coat: reddish brown, plant h.: 117cm, panicle l.: 12 cm</td>
<td>By (Mong hill tribe), Ban Khun Krang, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>31/Jan</td>
<td></td>
<td>Zea mays</td>
<td>Tien see kkie moo</td>
<td>P landrace</td>
<td></td>
<td>Chiang Mai, Ban Khun Krang, 60m from Chiang Mai, 1230m</td>
<td>rainy season, VI-X</td>
<td>hill planting</td>
<td>boiled and eaten</td>
<td>mountainous slope</td>
<td>good seed coat: purple black, plant h.: 170cm, panicle l.: 12.5 cm</td>
<td>By (Mong hill tribe), Ban Khun Krang, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>31/Jan</td>
<td></td>
<td>Zea mays</td>
<td>Tien du (black)</td>
<td>P landrace</td>
<td></td>
<td>Chiang Mai, Ban Khun Krang, 60m from Chiang Mai, 1230m</td>
<td>rainy season, VI-X</td>
<td>hill planting</td>
<td>boiled and eaten</td>
<td>mountainous slope</td>
<td>good seed coat: purple black, plant h.: 250cm, panicle l.: 1.13 cm</td>
<td>By (Mong hill tribe), Ban Khun Krang, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>31/Jan</td>
<td></td>
<td>Zea mays</td>
<td>Tien lueng</td>
<td>P landrace</td>
<td></td>
<td>Chiang Mai, Ban Khun Krang, 60m from Chiang Mai, 1230m</td>
<td>rainy season, VI-X</td>
<td>hill planting</td>
<td>boiled and eaten</td>
<td>mountainous slope</td>
<td>good seed coat: white, plant l.: 8.5 cm</td>
<td>By (Mong hill tribe), Ban Khun Krang, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>31/Jan</td>
<td></td>
<td>Zea mays</td>
<td>Khao phod lueng (yellow)</td>
<td>P landrace</td>
<td></td>
<td>Chiang Mai, Ban Khun Krang, 60m from Chiang Mai, 1230m</td>
<td>rainy season, VI-X</td>
<td>hill planting</td>
<td>boiled and eaten</td>
<td>mountainous slope</td>
<td>good seed coat: cream yellow, plant h.: 250cm, panicle l.: 19 cm</td>
<td>By (Mong hill tribe), Ban Khun Krang, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>1/Feb</td>
<td></td>
<td>Zea mays</td>
<td>Khao phod dus (black)</td>
<td>P landrace</td>
<td></td>
<td>Chiang Mai, Doi Pui, 118km from Chiang Mai, 120cm</td>
<td>rainy season, VI-X</td>
<td>hill planting</td>
<td>boiled and eaten</td>
<td>mountainous slope</td>
<td>good seed coat: purple black, plant h.: 180cm, panicle l.: 1.9-11 cm</td>
<td>Lee (Mong hill tribe), Doi Suthep-Pui, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>1/Feb</td>
<td></td>
<td>Zea mays</td>
<td>Khao phod khao (white)</td>
<td>P landrace</td>
<td></td>
<td>Chiang Mai, Doi Pui, 118km from Chiang Mai, 120cm</td>
<td>rainy season, VI-X</td>
<td>hill planting</td>
<td>boiled and eaten</td>
<td>mountainous slope</td>
<td>good seed coat: white, plant h.: 200-300 cm, panicle l.: 1.20-25 cm</td>
<td>Lee (Mong hill tribe), Doi Suthep-Pui, Chiang Mai</td>
<td></td>
</tr>
<tr>
<td>31/Jan</td>
<td></td>
<td>Zea mays</td>
<td>Khao phod lueng</td>
<td>In landrace</td>
<td></td>
<td>Chiang Mai, Ban Khun Krang, 60m from Chiang Mai, 1230m</td>
<td>rainy season, VI-X</td>
<td>hill planting</td>
<td>boiled and eaten</td>
<td>mountainous slope</td>
<td>good seed coat: yellow, waxy, other's the same of No. 95</td>
<td>By (Mong hill tribe), Ban Khun Krang, Chiang Mai</td>
<td></td>
</tr>
</tbody>
</table>

Notes 1) Sample: P-population, In-individual 2) Status: wild, weedy, landrace, improved, breeder's line, others. 3) Topography: swamp, flood plain, plain level, undulating, hill, mountainous, others. 4) Site: level, slope, summit, depression. 5) Drainage: poor, moderate, good, excessive. 6) "x" means data from hearing on the fields. Abbreviation: h. height, l. length, n. number, c. color, s. stage, d. day, m. c. mixed cropping, d. s. direct saving, s. c. shifting cropping, "x" means "not clearly"
<table>
<thead>
<tr>
<th>Collection No.</th>
<th>Date</th>
<th>Genus &amp; Species</th>
<th>Cultivar or local name</th>
<th>Sample P/ln</th>
<th>Status</th>
<th>LocalityProv.Village &amp; Altitude(m)</th>
<th>Crop season</th>
<th>Cultural practice</th>
<th>Usage</th>
<th>Topography Site Drainage</th>
<th>Characteristics of the Crops, Gained on the Fields</th>
<th>Notes</th>
<th>Name &amp; address etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>31/Jan</td>
<td>Amaranthus caudatus</td>
<td>Song doo (chopping)</td>
<td>In landrace</td>
<td>Chiang Mai, Ban Low Pong, 110km from Chiang Mai</td>
<td>rainy season</td>
<td>broadcasting pig's feed</td>
<td>undulating slope</td>
<td>□plant h.150cm, panicle l.:40-50cm</td>
<td>Navang, Ban Low Pong, Meesch, Chian Mai</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1) Sample: P=population, ln=individual 2) Status: wild, weedy, landrace, improved, breeder's line, others. 3) Topography: swamp, flood plain, plain level, undulating, hilly, mountainous, others. 4) Site: level, slope, summit, depression. 5) Drainage: poor, moderate, good, excessive. 6) "□" means data from hearing on the fields. 7) Abbreviation: h. height, l. length, n. number, c. color, s. stage, d. day, m.c. mixed cropping, d.s. direct saving, s.c. shifting cropping, r. road. 8) "□" means "not clearly" 9) "□" means collection in Thailand
### List of Collected Materials

<table>
<thead>
<tr>
<th>Collection No.</th>
<th>Date/Jan</th>
<th>Genus &amp; Species</th>
<th>Cultivar or local name</th>
<th>Sample P/ln</th>
<th>Status</th>
<th>Locality (Prov., Vill., km from Sigiriya, 140m)</th>
<th>Crop season</th>
<th>Cultural practice</th>
<th>Usage</th>
<th>Topography</th>
<th>Site</th>
<th>Drainage</th>
<th>Characteristics of the Crops, Gained on the Fields</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>11</td>
<td>Vigna radiata</td>
<td>kaha mu-ng</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Elukwella, 6 km from Sigiriya, 140m</td>
<td>maha</td>
<td></td>
<td></td>
<td>plain level</td>
<td></td>
<td>moderate</td>
<td>seed co.: yellow green, stem co.: green, plant h.: 18 cm, seed n.: pod: 21</td>
<td>Vasantha Sandenyska, Elukwella, Sigiriya</td>
</tr>
<tr>
<td>6</td>
<td>22</td>
<td>Vigna sinensis</td>
<td>ratu</td>
<td>P</td>
<td>landrace</td>
<td>Matale, Elukwella, 6 km from Sigiriya, 140m</td>
<td>maha</td>
<td>d.s.</td>
<td></td>
<td>plain level</td>
<td></td>
<td>moderate</td>
<td>plant h.: 77 cm, seed n.: pod: 5/10</td>
<td>Vasantha Sandenyska, Elukwella, Sigiriya</td>
</tr>
<tr>
<td>69-a</td>
<td>19</td>
<td>Vigna umbellata</td>
<td>moo mae</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Taldena, 14 km from Badulla, 200 m</td>
<td>hilly</td>
<td>steep slope</td>
<td></td>
<td>hilly slope</td>
<td></td>
<td></td>
<td>K.R.S.M. Garathi, Taldena, Boliyadda, Kethavelagedera</td>
<td></td>
</tr>
<tr>
<td>69-b</td>
<td>19</td>
<td>Vigna umbellata</td>
<td>moo mae</td>
<td>P</td>
<td>landrace</td>
<td>Badulla, Taldena, 14 km from Badulla, 200 m</td>
<td>hilly</td>
<td>steep slope</td>
<td></td>
<td>hilly slope</td>
<td></td>
<td></td>
<td>K.R.S.M. Garathi, Taldena, Boliyadda, Kethavelagedera</td>
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<tr>
<td>77</td>
<td>20</td>
<td>Vigna radiata</td>
<td>mung</td>
<td>P</td>
<td>landrace</td>
<td>Moneragala, Galakulugolla, 8 km from Passara, 390 m</td>
<td>mountainous slope</td>
<td></td>
<td></td>
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<td></td>
<td>R.M. Jayaratne, Galakulugolla, Kotamuduna, Passara</td>
<td></td>
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<tr>
<td>82</td>
<td>20</td>
<td>Dolichos uniflorus</td>
<td>kollu</td>
<td>P</td>
<td>landrace</td>
<td>Hambantota, Kudagamana, 8 km from Tissamaharama, 40 km</td>
<td>plain slope</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R.P. Dayadasa, Kudagamana, 8 left bank, Kirindi Oya Project</td>
<td></td>
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</tr>
</tbody>
</table>

Notes: 1) Sample: P=population, n=individual 2) Status: wild, weedy, landrace, improved, breeder's line, others. 3) Topography: swamp, flood plain, plain level, undulating, hilly, mountainous, others. 4) Site: level, slope, summit, depression. 5) Drainage: poor, moderate, good, excessive. 6) "x" means data from hearing on the fields. 7) Abbreviation: h. height, l. length, n. number, c.o. color, s. stage, d. day, w.c. mixed cropping, d.s. direct saving, s.c. shifting cropping, r. road, 8) "-" means "not clearly"
6. 西日本地域における野生グリの収集

七立栗（三度栗）の着果（花）状況
高知県幡多郡大和町馬荷地区13

七立栗（三度栗）の群生地
高知県幡多郡大和町馬荷地区B

7. ソ連国における寒地型牧草遺伝資源の探索収集

収集用自動車とソ連側スタッフ
（ブンモリエ付近の山道）

収集した荒廃草地の一例
（収集地：オロニキー）

8. スリランカおよびタイにおける雑穀類遺伝資源の探索

シコクピエの穂の乾燥
（スリランカ・バンバントタにて）

チェンマイ県ドイインタノン国立公園内
バンクンクラクン部落での収集