

インド・タミルナドゥ州におけるマメ科植物 遺伝資源多様性の保全 2009年

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Collection and Conservation of Leguminous Crops and Their Wild Relatives in Tamil Nadu, India, 2009

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Summary

Based on the Memorandum of Understanding between the National Institute of Agrobiological Sciences, Japan and Tamil Nadu Agricultural University, India, a field survey was conducted in Tamil Nadu State, India from 29th January 10th February, 2009. As a result, 134 accessions of leguminous plants consist of the genus *Cajanus*, *Lablab*, *Macrotyloma* and *Vigna*, were recorded and seed samples consisting of 99 cultivated and 35 wild accessions were collected. All the seed materials collected were deposited at Tamil Nadu Agricultural University, India. Genetic erosion of traditional pulse landraces is rapidly proceeding in Tamil Nadu mainly due to an increase in the area of cash crops.

Introduction

In order to facilitate the collaborative research activities on plant genetic resources, the National Institute of Agrobiological Sciences, Japan and the Tamil Nadu Agricultural University, India agreed to establish the Memorandum of Understanding (MOU) on Joint Research of Genetic Resources in April, 2007. This is a report of the second collaborative field survey on leguminous plants in Tamil Nadu, India under this MOU. A report of the first trip was published and available from NIAS genebank web site (Tomooka *et al.*, 2008; <http://www.gene.affrc.go.jp/>

pdf/report/plant-H19.pdf ; you can download a Tamil Nadu trip report by clicking the title in the content listed on page 7 of the PDF book).

Methods

We surveyed mainly in the central and northern part of Tamil Nadu State by car from 29th January to 10th February, 2009 as shown in Table 1 and Fig. 1. Seeds, herbarium specimens and root nodules (if available) were collected. Information on collection sites including village name, altitude, latitude, longitude, habitat, cultural practices and other ecological data of the collection sites were recorded as passport data (Table 3). Identification of wild *Vigna* plants was done based on a key characteristics prepared by Tomooka *et al.* (2002, p.26-28).

Results and Discussion

A total of 134 legume accessions including the genus *Cajanus*, *Lablab*, *Macrotyloma* and *Vigna* consist of 9 species were recorded and seed samples were collected (Table 2 & 3). Collected seed samples are conserved at Tamil Nadu Agricultural University. They consist of 99

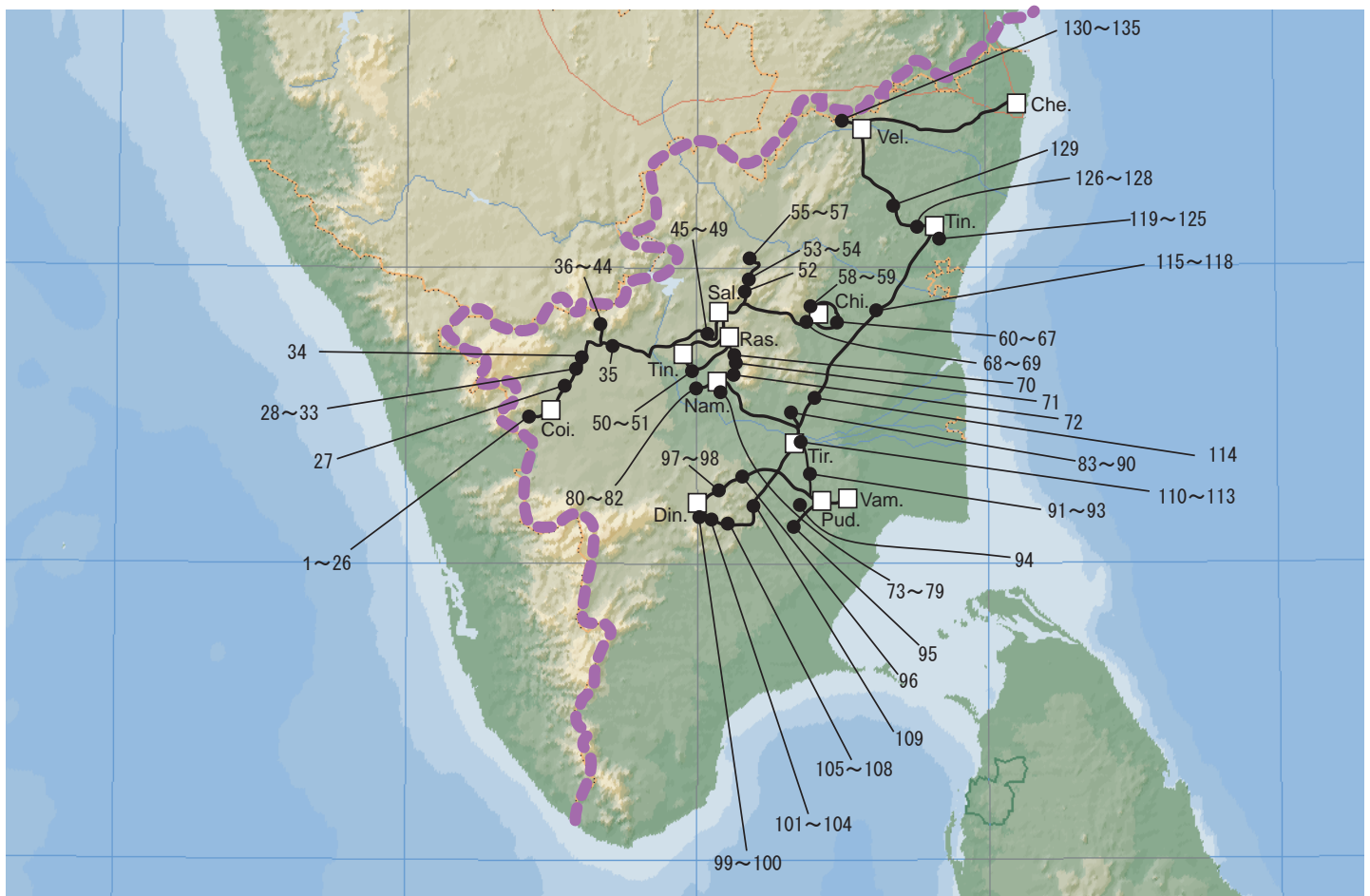


Fig. 1. Exploration route (—), collection sites (●), collection numbers (Figures) and major towns (□) in Tamil Nadu, India.

Town name abbreviations:

Che (Chennai), Chi (Chinna Salem), Coi (Coimbatore), Din (Dindigul), Nam (Namakkal),
 Pud (Pudukkottai), Ras (Rasipuram), Sal (Salem), Tin (Tindivanam), Tir (Tiruchirappalli),
 Vam (Vamban), Vel (Vellore)

Table 1. Itinerary 日程表 (インド・タミルナドゥ)

Day	Date		Itinerary	Activities	Stay
1	2009/1/27	Tue	Narita 10:45 -- (TG 641) -- 15:45 BKK	Transportation	Bangkok
2	2009/1/28	Wed	BKK 10:50 -- (TG 521) -- 12:45 Chennai 19:25 -- 9W3533 -- 20:35 Coimbatore	Transportation	Coimbatore
3	2009/1/29	Thu	West of Coimbatore	Exploration	Coimbatore
4	2009/1/30	Fri	Seminar & Discussion at Tamil Nadu Agricultural University	Discussion	Coimbatore
5	2009/1/31	Sat	Coimbatore -- Sathyamagalan -- Kalkadambur (Hill top) -- Bhavani -- Rasipuram	Exploration	Rasipuram
6	2009/2/1	Sun	East of Rasipuram	Exploration	Rasipuram
7	2009/2/2	Mon	Rasipuram -- Salem -- Harur -- Attur -- Chinna Salem	Exploration	Chinna Salem
8	2009/2/3	Tue	Around Chinna Salem	Exploration	Chinna Salem
9	2009/2/4	Wed	Around Chinna Salem -- Rasipuram	Exploration	Rasipuram
10	2009/2/5	Thu	Rasipuram -- Kolli Hills -- Namakkal -- Tiruchirappalli	Exploration	Tiruchirappalli
11	2009/2/6	Fri	Tiruchirappalli -- Manachanallur -- Tiruchirappalli -- Pudukkottai -- Vamban Pulses Research Centre	Exploration	Vamban
12	2009/2/7	Sat	Vamban -- Pudukkottai -- Manapparai -- Dindigul -- Sirumalai -- Dindigul	Exploration	Dindigul
13	2009/2/8	Sun	Dindigul -- Nattam -- Kottampatti -- Tiruchirappalli -- Tindivanam	Exploration	Tindivanam
14	2009/2/9	Mon	Tindivanam -- Gingee -- Arani -- Vellore	Exploration	Vellore
15	2009/2/10	Tue	Vellore -- Pallikonda -- Gudiyatham -- Chennai 00:15 -- (TG 338) --	Exploration/ Transportation	On flight
16	2009/2/11	Wed	-- 05:10 Bangkok -- Kampaeng Saen (Kasetsart University)	Discussion	Kampaeng Saen
17	2009/2/12	Thu	Kampaeng Saen (Kasetsart University) -- Bangkok	Discussion	Bangkok
18	2009/2/13	Fri	Bangkok 08:20 -- (TG 676) -- Narita 16:00	Transportation	Narita

Table 2. A summary of collected materials

収集品の内訳

Species	Cultivated	Wild
<i>Cajanus cajan</i>	4	
<i>Lablab purpureus</i>	23	
<i>Macrotyloma uniflorum</i>	4	
<i>Vigna aconitifolia</i>	22	3
<i>Vigna mungo</i>	7	
<i>Vigna radiata</i>	18	4
<i>Vigna stipulacea</i>		9
<i>Vigna trilobata</i>		19
<i>Vigna unguiculata</i>	21	
Total	99	35

cultivated and 35 wild accessions.

Collected cultivated and wild legumes

Seven cultivated legume species were collected (Table 2). They are *Cajanus cajan* (pigeon pea, 4 accessions), *Lablab purpureus* (hyacinth bean, 23 accessions), *Macrotyloma uniflorum* (horse gram, 4 accessions), *Vigna aconitifolia* (moth bean, 22 accessions), *Vigna mungo* (black gram, 7 accessions), *Vigna radiata* (mungbean, 18 accessions) and *Vigna unguiculata* (21 accessions; consist of 4 yard long bean accessions and 17 cowpea accessions).

For wild legumes, *Vigna aconitifolia* (3 accessions), *V. radiata* (4 accessions), *V. stipulacea* (9 accessions) and *V. trilobata* (19 accessions) were collected.

Cajanus cajan (Pigeon pea)

Pigeon pea is common in Tamil Nadu and widely cultivated. Major local name is “Thuvarai”. Three accessions (TN7, TN8 and TN25) were collected at dry lowland upland field located west of Coimbatore. A farmer (Mr. Aruchamy) said TN7 (whitish seed color) is cultivated for vegetable and TN8 (reddish seed color) is cultivated for dry seed. Pigeon pea was cultivated in rows and several other leguminous crops (*Lablab purpureus*, *Vigna mungo*, *Vigna radiata* and *Vigna unguiculata*) were mixed planted between rows at this site. This type of mixed cropping seems to be common at rainfed upland field in Tamil Nadu.

Lablab purpureus (Hyacinth bean)

Hyacinth bean is common in Tamil Nadu. There are two types, “Avarai” and “Mochai”.

“Avarai” is cultivated mainly for young pods as vegetables. “Avarai” is usually cultivated in kitchen gardens. Young pods and immature seeds are processed into “Sambal” (rice soup) and “Poriyal” or “Kootu” (vegetable curry). The other type “Mochai” is cultivated for immature seeds and dry seeds. Farmer usually grow “Mochai” as a field bean and a large number of plants are

raised for commercial purposes. Immature seeds are used for vegetable purposes like “Avarai”. Dry seeds are used to make various kinds of dishes. However, local names “Avarai” and “Mochai” are sometimes used just for *Lablab* beans. There are wide variations in seed colors and plant types.

A farmer (Mrs. Mariyammal, Dharmapuri Province) told that her local variety (TN53) is suitable for preparing “Sambal” (bean soup) which is usually prepared from pigeon pea, and she sells TN53 at a price of 80 Rp/kg this year (very high price). She grows another variety (TN54) of *Lablab* bean which is obtained from her relatives place.

Another farmer (Mr. Muthaih, Dindigul Province) told his special tasty *Lablab* variety (TN107) called “Bore (tasty) Mochai” gave a price of 80 Rp/kg. He grows another *Lablab* variety (TN108) which is more drought tolerant and gives higher seed yield but lower market price.

Macrotyloma uniflorum (Horse gram)

Based on the field observations, horse gram is generally grown as a mono crop. A major local name is “Kollu Payaru”.

At a collection site located about 1 km S of Namakkal town, mungbean (TN73), moth bean (TN74, TN75), cowpea (TN77) and horse gram (TN78) were cultivated. Mungbean, moth bean and cowpea were mixed cropped, while horse gram was mono cropped in a part of the same upland field. At this site, *Vigna trilobata* plants (TN76) which had bigger pods like domesticated plants were also collected.

Vigna aconitifolia (Moth bean)

Major local name of moth bean is “Nari Payaru” (fox bean) or “Pani Payaru” (dew bean). As was noted in the previous year’s report (Tomooka *et al.*, 2008), farmers recognized two types of moth bean cultivar called “Wild Type” and “Cultivated Type”.

However, both are apparently domesticated plants. “Wild Type” is characterized by deeply lobed leaflets and by prostrating long crawling stems. On the other hand, “Cultivated Type” is characterized by shallowly lobed leaflets and by nearly-erect short main stems. While “Wild Type” is generally cultivated under a mixed cropping system with sorghum, “Cultivated Type” is cultivated as a mono crop.

Near Tindivanam town located in the northeastern part of Tamil Nadu Province, “Cultivated Type” of moth bean is widely grown (Photo 1). In a farmer’s field at Iraiyanur village located ca. 4km SE of Tindivanam, we have recognized morphological variation among “Cultivated Type”. TN119 had an erect stem with broad shallowly lobed leaflet. TN120 had an erect stem with deeply lobed leaflet. TN122 had an erect stem with slightly longer prostrate lateral branches. TN122.5 had an erect stem and characterized by the pod formation at lower basal parts. According to a farmer (Mrs. Santhanam), she brought “Cultivated Type” of moth bean to Iraiyanur village from Mailam village about 3 years ago. In Mailam village, she knew this “Cultivated Type” about 15 years ago. She prefers “Cultivated Type” because it is easy to pick pods and is slightly earlier in its maturity. She said she did not apply any chemicals but there was no insect and disease problem with this crop. The market price of moth bean seeds (40 Rp/kg) is better than that of black gram (30 Rp/kg), because moth bean seeds are preferred by the

confectionary factory near Chennai town.

A farmer (Mr. Appugounder) in Rajapalayam village, Namakkal Province, told that when soaked moth bean seeds were given to cattle, milk yield became higher (TN47). This seems to be a common understanding among farmers in Tamil Nadu.

Wild form of *Vigna aconitifolia*

During the survey, we have found a “likely to be true wild” (not domesticated) form of moth bean. Three accessions (TN61, TN66, TN67) were collected in sandy soil sorghum fields near Chinna Salem, Viluppuram Province. Two accessions (TN61, TN67: Photo 2) have deeply lobed leaflet, while TN66 has shallowly lobed leaflet and slightly pigmented in purple color (Photo 3).

According to Baudoin and Maréchal (1988), wild form of *V. aconitifolia* has not been denominated by any taxonomist (Taxonomic distinction by variety level has been proposed for other Asian *Vigna* cultigens and wild forms; mungbean, black gram, azuki bean and rice bean). Smartt (1985) reported that although *V. aconitifolia* has responded to selection for larger seed size, it has retained a wild-type vegetative morphology with no apparent increase in growth vigor or leaf area. However, these three wild accessions (TN61, TN66, TN67) have extremely slender stem and much smaller leaves compared with cultigens (with both “Cultivated Type” and “Wild Type” of cultivars). Considering the development of erect stem cultivars (“Cultivated Type”) of moth bean as mentioned above and the existence of a slender wild form, domestication of *V. aconitifolia* proceeded more than previously recognized.

Wild form of *V. aconitifolia* was reported in the northern or north-western plains and in the Deccan plateau (Arora and Nayar, 1984) or dry regions of Rajasthan and Madhya Pradesh (Bisht et al., 2005). Therefore, it seems to be the first report of wild form of *V. aconitifolia* from south India (Tamil Nadu). However, it should be noted that as Smartt (1985) pointed out *V. aconitifolia* and *V. trilobata* had often been confused. In addition, *V. stipulacea* (not separately treated but included in *V. trilobata* in India) and *V. aridicola* (at present reported only from Sri Lanka but possibly distributed in India) can also be confused because they have very similar vegetative morphology (Tomooka et al., 2006). Taxonomic treatment of the wild *V. aconitifolia* like accessions collected in this trip needs to be examined further.

Vigna mungo (Black gram)

Black gram is especially important in Tamil Nadu State and is cooked into various dishes. A local black gram cultivar (TN109) collected in Tiruchirappalli Province showed good performance with plenty of flowers. It was cultivated around the rectangle shaped groundnut field. Beside this field, the same farmer was just sowing black gram seeds near the transplanted tomato seedlings. The land was irrigated. We have frequently observed a cultivation of black gram on the bunds or beside paddy rice fields (Photo 4), while closely related mungbean cultivation can not be seen in this situation.

Wild black gram (*V. mungo* var. *silvestris*) is reported to be distributed in Tamil Nadu, but we could not find natural population of this species.

Mungbean (*V. radiata*) and wild mungbean

The center of mungbean genepool diversity is considered to be in India (Sangiri *et al.*, 2007). However, the number of available accessions for wild mungbean germplasm from India is still limited. Mungbean is often cultivated on a dry field together with some other pulse crops such as pigeon pea, hyacinth bean, moth bean and cowpea. Local mungbean cultivated under dry condition has very thick main stem with long trailing lateral branches.

Four accessions of wild mungbean (*V. radiata* var. *sublobata*) were collected (TN60, TN68, TN116, TN131). Three of them were growing in sorghum fields. They seem well adapted to dry sandy soil condition. TN116 has thick stem, large leaves and pods, and is considered as an intermediate “Weedy” type. A population of wild mungbean (TN68) was found in a fallow field. A farmer in this area told that local name of these plants was “Karum Payaru (black bean)”. She said this bean had been cultivated and harvested for human consumption after boiled. Sometimes it was cooked with sugar to make sweets. She said it was tolerant to drought and insect pests and seeds were sold at local shops up to several years ago.

Vigna stipulacea (semi-domesticated form and wild form)

The name *V. stipulacea* has not been used in the Indian literatures and this species seems to have been included in the description of *V. trilobata* (Tomooka *et al.*, 2006). As was mentioned in the previous survey (Tomooka *et al.*, 2008), *V. stipulacea* is a semi-domesticated species in Tamil Nadu. The semi-domesticated form has pods with lower shattering and has slightly larger seeds compared with wild form of *V. stipulacea*. Because of the low pod shattering habit, farmers can harvest them by cutting the stem. Farmers grow this crop for grain production for human, as green manure or as fodder production.

Nine accessions of wild form were collected this year (TN35: Photo 5, TN56, TN71, TN72, TN95, TN98, TN114, TN129, TN134). Most of them were found growing in a wet clay soil habitat such as in and around paddy field. In a site near Pudukkottai, a large wild population of *V. stipulacea* (TN95) was found on a fallow paddy field. A farmer (Mrs. Solaiammal, Photo 6) said this plant is used as leafy vegetable, green manure and fodder for cattle (milk yield increase). She also told that immature seeds can be eaten raw. Mature seeds are fried and eaten, and are used to prepare curry.

It should be noted that confused species, *V. trilobata*, grows in a contrasting habitat, i.e., dry sandy soil environment and usually not sympatric with *V. stipulacea*. In one place, however, *V. stipulacea* and *V. trilobata* were found growing nearby site (TN97 & TN98). At this site, *V. trilobata* was growing in a road side dry habitat, while *V. stipulacea* was growing in a wet environment beside paddy and wet fallow land.

In the most cases, *V. stipulacea* formed plenty of nodules on its fibrous roots. In contrast, *V. trilobata* has a long main tap root and nodules are seldom found (Photo 7).

Vigna trilobata

Tomooka *et al.* (2006) suggested “Agricultural Population” and “Wild Forms” of *V. trilobata* described in the literature of Babu *et al.* (1985) corresponded well to *V. stipulacea* and *V. trilobata*, respectively. However in the present survey, it was confirmed that *V. trilobata* had also

been cultivated and eaten by human and also used as a fodder in Tamil Nadu.

At the mixed cropping field of several pulse crops in Pasur village, we found a population of *V. trilobata* (TN32). A farmer (Mrs. Subramanian) growing pulses told us that they used to cultivate *V. trilobata* and it is naturally growing now. In Mel Nariyappanur village, Viruppuram Province, plenty of *V. trilobata* plants (TN69) were growing on a harvested sorghum field. A farmer of this field said they did not eat this bean but used it for feeding animals. She also said that she knew people use *V. trilobata* seeds for making “Dosai” (a fermented pancake usually prepared using black gram seed powder in other places). Another farmer growing several pulse crops near her house in Tiruchirappalli Province told us that she was eating *V. trilobata* (TN90) and the local name was “Nari Payaru (fox bean)”.

Usually “Nari Payaru” is used for *V. aconitifolia* but she use “Kumma Payaru” for *V. aconitifolia*. In a Konakkampattu village at Viluppuram Province, several woman farmers were weeding in a groundnut field. One lady (Mrs. Sadaiyan) said they eat young pods of *V. trilobata* (TN127).

There are several populations suggesting that *V. trilobata* is semi-domesticated in Tamil Nadu. Plants in a population (TN76) have big pods like a cultivar (Photo 8). Some plants in a population (TN81) have large leaflets like those of mungbean. Generally, seed size of Tamil Nadu populations of *V. trilobata* are larger than that of Sri Lankan populations.

Vigna unguiculata (cowpea and yard long bean)

Cultivation of cowpea is very common in dry upland fields. Cowpea landraces seems to be highly tolerant to drought. Seventeen accessions were collected. Yard long bean cultivar group seems less common and four accessions were collected.

Genetic erosion

There is rapid genetic erosion of the traditional pulses in Tamil Nadu. This is mainly because of the facilitation of irrigation and the market economy systems. Most of the traditional pulses had been cultivated under rainfed dry farmland where the main cereal crop was sorghum. When irrigation water becomes available (by Governmental assistance policy), farmers tend to change their cultivation from subsistence crops to cash crops. Former sorghum dominated area such as Namakkal, Salem, Dharmapuri, Krishnagiri and Vellore provinces changed to cash crops such as maize and cassava. The demand for maize is high from the poultry industry for feeding chickens. Chicken meats are exported mainly to the Gulf countries. The demand for cassava is also high from the cassava starch pellets industries. The products are mainly exported to the Gulf countries.

In the rural areas of Tamil Nadu, the labor shortage is becoming a major problem for agriculture because people tend to go to the industrial sectors for earning cash. However, in the case of maize and cassava production, labor shortage is not a problem. The most laborious work in cultivating maize and cassava is the harvesting process. For these industrial crops, however, farmers usually grow these crops on a contract basis with the industrial sector. Harvesting process is fully mechanized and industrial sectors come to farmers land and harvest the products by their machines.

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和文摘要

本報告は、独立行政法人農業生物資源研究所ジーンバンクとインド・タミルナドゥ農業大学の間で2007年4月に締結した協同研究協定(MOU)に基づいて行われたインド・タミルナドゥ州における二回目のマメ科植物遺伝資源の調査報告である。調査は、2009年1月29日～2月10日にかけて行った。調査の結果、灌漑水が利用可能になった地域において在来作物の栽培は著しく減少していることが明らかになった。タミルナドゥ州では、政府の援助により、井戸による灌漑施設が急速に普及してきており、トウモロコシやキャッサバなどの商品作物栽培も急速に広がってきていることから、在来作物の消失が懸念される。

乾燥が厳しい天水農業地域では、ソルガムとマメ科在来作物(リョクトウ、ササゲ、モスビーン、フジマメ、キマメ等)の混作が残っていた。ホースグラムも同様の環境で栽培されていたが、単作されている例が多かった。このような環境においては、耐乾性に優れた野生種 *V. trilobata* と *V. radiata* var. *sublobata* の自生も見られた。*V. trilobata* に関しては、今回の調査で、その栽培と人による食用としての利用が確認された他、ある程度栽培化が進んだと思われるような系統も収集された。また、これまでその存在が不明であったモスビーン (*V. aconitifolia*) の野生種と思われる3系統も、同様の乾燥環境下で発見された。これら3系統の分類学的取り扱いについては、今後詳細に検討する必要がある。

これら乾燥地のマメ科植物とは対照的に、これまで *V. trilobata* と混同されてきた *V. stipulacea* は、水田等の湿った粘土質土壌の生息地で生育していた。作物の中では、ケツルアズキ (*V. mungo*) が水田の畦で栽培される例が多かったことから、加湿な環境に適応している栽培種であると考えられた。

菜食主義者が多いインドにおいては、マメ科作物はタンパク供給源として重要な位置を占めており、なかでも *Vigna* 属作物（ケツルアズキとリョクトウ）の安定的な生産と品種改良等による収量増は緊急の課題となっている。近年、インドにおいては、リョクトウの生産量が不足しており、中国等からの輸入に依存していることから、その取引価格は高騰しているため、農民の生産意欲は高い。今後の共同研究による大きな成果が期待できる。

Table 3. A passport data of collected materials

収集品のパスポートデータ

Coll. No.	Coll. Date	Species name	Status	Local Name	Collection Site	Province	Latitude
2009TN1	29-Jan-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated	Natta Pacha Payaru	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN2	29-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN3-1	29-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Sesquipedalis E. Westphal	cultivated	Thatta Payaru curry type	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN3-2	29-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Sesquipedalis E. Westphal	cultivated	Thatta Payaru curry type	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN4	29-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Karupu Avarai	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN5	29-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Oruru Avarai	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN6	29-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Karupu Avarai	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN7	29-Jan-09	<i>Cajanus cajan</i> (L.) Millsp.	cultivated	Malan Thuvarai	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN8	29-Jan-09	<i>Cajanus cajan</i> (L.) Millsp.	cultivated	Malan Thuvarai	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN9	29-Jan-09	<i>Vigna mungo</i> (L.) Hepper	cultivated	Ulanthu	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN10	29-Jan-09	<i>Sorghum bicolor</i> (L.) Moench ssp. bicolor	cultivated	Manja Cholam	Molapalayam village, ca. 15km W of Coimbatore	Coimbatore	N10-56-32.9
2009TN11	29-Jan-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated	Pacha Payaru	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN12	29-Jan-09	<i>Vigna mungo</i> (L.) Hepper	cultivated	Ulanthu	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN13	29-Jan-09	<i>Macrotyloma uniflorum</i> (Lam.) Verdc.	cultivated	Kollu Payaru	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN14	29-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Avarai	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN15	29-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Avarai	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN16	29-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Avarai	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN17	29-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Avarai	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN18	29-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Sesquipedalis E. Westphal	cultivated	Thatta Payaru	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN19	29-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Avarai	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN20	29-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Mondan Thatta Payaru	Nathegoun der Pudur village, ca. 20km W of Coimbatore	Coimbatore	N10-56-57.5

Longitude	Altitude (m)	Soil	Seed	Herbarium	Nodule	Remarks
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Brown pod. Drought tolerance. Low shattering.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Grain type.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Vegetable type. Mottled seeds.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Vegetable type. Brown seeds.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Black seeds. Only dry seeds are used.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Brown seeds. Vegetable pod.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Mottled seeds.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). White seeds for vegetable.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Red seeds.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Small seeds good for powder.
E076-49-08.5	478m	gravel	bulk	no	no	Seeds from Mr. Aruchamy (a farmer of Molapalayam village). Yellow Sorghum. Manja (=yellow)
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). June - 3 months
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village).
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village).
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). Black seeds.
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). Black seeds. Creeper type.
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). Mottled seeds.
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). White flower. Reddish brown seeds.
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). Vegetable type.
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). Field bean. Mature seeds used by boiling.
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). Big pod.

Table 3(Continued).

Coll. No.	Coll. Date	Species name	Status	Local Name	Collection Site	Province	Latitude
2009TN21	29-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Nathegoun der Pudur village, ca. 20 km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN22	29-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Nathegoun der Psudur village, ca. 20 km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN23	29-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Sesquipedalis E. Westphal	cultivated	Thatta Payaru	Nathegoun der Pudur village, ca. 20 km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN24	29-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Nathegoun der Pudur village, ca. 20 km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN25	29-Jan-09	<i>Cajanus cajan</i> (L.) Millsp.	cultivated	Malai Thuvarai	Nathegoun der Pudur village, ca. 20 km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN26	29-Jan-09	<i>Sesamum indicum</i> L.	cultivated	Ellu	Nathegoun der Pudur village, ca. 20 km W of Coimbatore	Coimbatore	N10-56-57.5
2009TN27	31-Jan-09	<i>Macrotyloma uniflorum</i> (Lam.) Verdc.	cultivated	Kollu Payaru	ca. 30 km NE of Coimbatore, along R209, near Annur	Coimbatore	N11-11-12.8
2009TN28	31-Jan-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated	Pacha Payaru	Pasur village, ca. 38 km NE of Coimbatore, along R209	Coimbatore	N11-16-47.3
2009TN29	31-Jan-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated	Pacha Payaru	Pasur village, ca. 38 km NE of Coimbatore, along R209	Coimbatore	N11-16-47.3
2009TN30	31-Jan-09	<i>Vigna mungo</i> (L.) Hepper	cultivated	Uludu	Pasur village, ca. 38 km NE of Coimbatore, along R209	Coimbatore	N11-16-47.3
2009TN31	31-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Pasur village, ca. 38 km NE of Coimbatore, along R209	Coimbatore	N11-16-47.3
2009TN32	31-Jan-09	<i>Vigna trilobata</i> (L.) Verdc.	wild	Nari Payaru	Pasur village, ca. 38 km NE of Coimbatore, along R209	Coimbatore	N11-16-47.3
2009TN33	31-Jan-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated	Pacha Payaru	Pasur village, ca. 38 km NE of Coimbatore, along R209	Coimbatore	N11-16-47.3
2009TN34	31-Jan-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		ca. 43 km NE of Coimbatore, along R209	Coimbatore	N11-18-47.5
2009TN35	31-Jan-09	<i>Vigna stipulacea</i> (Lamarck) Tateishi	wild	Nari Payaru	ca. 50 km W of Erode, 5 km W of Gopichettipalayam	Erode	N11-28-00.7
2009TN36	31-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Kalkadambur village, ca. 70 km NW of Erode	Erode	N11-37-27.5
2009TN37	31-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Kalkadambur village, ca. 70 km NW of Erode	Erode	N11-37-27.5
2009TN38	31-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Kalkadambur village, ca. 70 km NW of Erode	Erode	N11-37-27.5
2009TN39	31-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Kalkadambur village, ca. 70 km NW of Erode	Erode	N11-37-27.5
2009TN40	31-Jan-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated	Thatta Payaru	Kalkadambur village, ca. 70 km NW of Erode	Erode	N11-37-27.5
2009TN41	31-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Avarai	Kalkadambur village, ca. 70 km NW of Erode	Erode	N11-37-27.5
2009TN42	31-Jan-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Avarai	Kalkadambur village, ca. 70 km NW of Erode	Erode	N11-37-27.5
2009TN43	31-Jan-09	<i>Macrotyloma uniflorum</i> (Lam.) Verdc.	cultivated	Kollu Payaru	Kalkadambur village, ca. 70 km NW of Erode	Erode	N11-37-27.5

Longitude	Altitude (m)	Soil	Seed	Herbarium	Nodule	Remarks
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). Larger seeds.
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village).
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village). Vegetable type.
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village).
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village).
E76-47-43.3	480m	gravel	bulk	no	no	Seeds from Mr. Anganagounder (a farmer of Nathegoun der Pudur village).
E77-03-44.6	390m	gravel	bulk	no	no	Mono cropping
E77-07-13.9	372m	gravel	bulk	no	no	Collected in a field of Mr. Subramanian. Taste different. Side dish. Good for making Wada (fermented bean doughnut). Very thick stem. Sometimes twining. Drought tolerant.
E77-07-13.9	372m	gravel	bulk	no	no	Collected in a field of Mr. Subramanian. Small dark green seeds.
E77-07-13.9	372m	gravel	bulk	no	no	Collected in a field of Mr. Subramanian.
E77-07-13.9	372m	gravel	bulk	no	no	Collected in a field of Mr. Subramanian.
E77-07-13.9	372m	gravel	bulk	yes	no	Collected in a field of Mr. Subramanian. Cultivated up to 4 years ago.
E77-07-13.9	372m	gravel	bulk	no	no	Collected in a field of Mr. Subramanian. Brown seeds
E77-08-38.1	326m	gravel	individual	no	no	Growing in a farmer's field. Only one pod collected. Seems to be resistant to virus.
E77-24-38.1	216m	clay	individual	yes	yes	Beside paddy field. Only 2 pods collected. Others eaten by buffalo. No disease seen.
E77-19-52.4	832m	gravel	bulk	no	no	Mixed cowpea seeds supplied from a farmer's storage (Mr. Subramanian). Disease and insect resistance. Tasty. Young pods also eaten as vegetables. Mottled black small seeds separated.
E77-19-52.4	832m	gravel	bulk	no	no	Mixed cowpea seeds supplied from a farmer's storage (Mr. Subramanian). Disease and insect resistance. Tasty. Young pods also eaten as vegetables. Mottled black big seeds separated.
E77-19-52.4	832m	gravel	bulk	no	no	Mixed cowpea seeds supplied from a farmer's storage (Mr. Subramanian). Disease and insect resistance. Tasty. Young pods also eaten as vegetables. Flat pale brown seeds separated.
E77-19-52.4	832m	gravel	bulk	no	no	Mixed cowpea seeds supplied from a farmer's storage (Mr. Subramanian). Disease and insect resistance. Tasty. Young pods also eaten as vegetables. Light brown seeds separated.
E77-19-52.4	832m	gravel	bulk	no	no	Mixed cowpea seeds supplied from a farmer's storage (Mr. Subramanian). Disease and insect resistance. Tasty. Young pods also eaten as vegetables. Flat small pale brown seeds separated.
E77-19-52.4	832m	gravel	bulk	no	no	Seeds supplied from a farmer's storage (Mr. Subramanian). White seeds.
E77-19-52.4	832m	gravel	bulk	no	no	Seeds supplied from a farmer's storage (Mr. Subramanian). Black seeds.
E77-19-52.4	832m	gravel	bulk	no	no	Seeds supplied from a farmer's storage (Mr. Subramanian).

Table 3(Continued).

Coll.No.	Coll. Date	Species name	Status	Local Name	Collection Site	Province	Latitude
2009TN44	31-Jan-09	<i>Cajanus cajan</i> (L.) Millsp.	cultivated	Thuravai	Kalkadambur village, ca. 70 km NW of Erode	Erode	N11-37-27.5
2009TN45	1-Feb-09	<i>Vigna trilobata</i> (L.) Verdcourt	wild		ca. 10 km NW of Rasipuram	Namakkal	N11-27-51.7
2009TN46	1-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		ca. 13 km NW of Rasipuram	Namakkal	M11-28-34.6
2009TN47	1-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Nari Payaru	Rajapalayam village, ca. 15 km NW of Rasipuram	Namakkal	N11-29-17.0
2009TN48	1-Feb-09	<i>Vigna mungo</i> (L.) Hepper	cultivated	Uludu	Rajapalayam village, ca. 15 km NW of Rasipuram	Namakkal	N11-29-17.0
2009TN49	1-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Rajapalayam village, ca. 15 km NW of Rasipuram	Namakkal	N11-29-17.0
2009TN50	1-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild	Kattu (=wild) Nari Payaru	Thalakarai Kollaram village, ca. 10 km SE of Tiruchengodu	Namakkal	N11-17-22.2
2009TN51	1-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Nari Payaru	Thalakarai Kollaram village, ca. 10 km SE of Tiruchengodu	Namakkal	N11-17-22.2
2009TN52	2-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Mochai	Adimalaipudar village, ca. 20 km NE of Salem	Salem	N11-46-06.8
2009TN53	2-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Mochai	Kalipettai village, ca. 30 km NE of Salem toward Harur	Dharmapuri	N11-50-45.4
2009TN54	2-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Mochai	Kalipettai village, ca. 30 km NE of Salem toward Harur	Dharmapuri	N11-50-45.4
2009TN55	2-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Avarai	ca. 5 km W of Harur	Dharmapuri	N12-01-12.5
2009TN56	2-Feb-09	<i>Vigna stipulacea</i> (Lamarck) Tateishi	wild		ca. 5 km W of Harur	Dharmapuri	N12-01-01.2
2009TN57	2-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated	Pacha Payaru	ca. 5 km W of Harur	Dharmapuri	N12-01-13.3
2009TN58	3-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Nari Payaru	Elavadi village, ca. 20 km NE of Attur	Viluppuram	N11-39-04.5
2009TN59	3-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		Kalanatam village, ca. 32 km NE of Attur	Viluppuram	N11-40-0.0
2009TN60	3-Feb-09	<i>Vigna radiata</i> (L.) Wilczek var. <i>sublobata</i> (Roxb.) Verdc.	wild		Chinna Salem village, ca. 30 km E of Attur	Viluppuram	N11-37-24.2
2009TN61	3-Feb-09	<i>Vigna</i> sp. (<i>Vigna aconitifolia</i> ?)	wild		Chinna Salem village, ca. 30 km E of Attur	Viluppuram	N11-37-24.2
2009TN62	3-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Chinna Salem village, ca. 30 km E of Attur	Viluppuram	N11-37-24.2
2009TN63	3-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		Chinna Salem village, ca. 30 km E of Attur	Viluppuram	N11-37-24.2
2009TN64	3-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Nari Payaru	market at Nainartalayam shop, in Chinna Salem village, ca. 30km E of Attur	Viluppuram	N11-34-39.0
2009TN65	3-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		ca. 30 km E of Attur	Viluppuram	N11-33-13.6
2009TN66	3-Feb-09	<i>Vigna</i> sp. (<i>Vigna aconitifolia</i> ?)	wild		ca. 30 km E of Attur	Viluppuram	N11-33-13.6
2009TN67	3-Feb-09	<i>Vigna</i> sp. (<i>Vigna aconitifolia</i> ?)	wild		ca. 30 km E of Attur	Viluppuram	N11-33-13.6

Longitude	Altitude (m)	Soil	Seed	Herbarium	Nodule	Remarks
E77-19-52.4	832m	gravel	bulk	no	no	Seeds supplied from a farmer's storage (Mr. Subramanian).
E78-06-19.0	238m	gravel	bulk	yes	no	Peduncle about 50cm and big leaf. Very good growth in a hole of coconut seedling.
E78-05-25.2	219m	gravel	bulk	no	no	In a sorghum field.
E78-04-35.5	230m	gravel	bulk	no	no	Seeds from Mr. Appugounder (a farmer of Rajapalayam village). For food purpose: Oct. sowing - Dec. harvest. For fodder purpose: Jun./Jul. sowing (not heavy rain). Fodder yield is more in this season. Stem become very long. <i>Vigna aconitifolia</i> seeds also given to cattle, then milk yield is more from cattle. Soaked in water then crushed and given to cattle.
E78-04-35.5	230m	gravel	bulk	no	no	Seeds from Mr. Appugounder (a farmer of Rajapalayam village). Maybe Vamban 3 (a released variety).
E78-04-35.5	230m	gravel	bulk	no	no	Seeds from Mr. Appugounder (a farmer of Rajapalayam village). Maybe improved variety.
E77-58-57.9	176m	gravel	bulk	no	no	Mr. T. R. Shingaram. Many <i>V. trilobata</i> plants grow in a rainfed sorghum field. They are harvested together with sorghum stalks as a fodder.
E77-58-57.9	176m	gravel	bulk	no	no	Mr. T. R. Shingaram.
E78-18-16.8	425m	gravel	bulk	no	no	Field bean.
E78-21-31.0	473m	gravel	bulk	no	no	Seeds from Mrs. Mariyammal. Brown seeds. Prepare "Sambar" (bean soup which is usually prepared from pigeon pea). Dry seeds sold at 80 Rp/kg to the market (very high price).
E78-21-31.0	473m	gravel	bulk	no	no	Mrs. Mariyammal. Pale brown seeds variety obtained from her relative at Mechri village.
E78-24-49.9	385m	gravel	bulk	no	no	Seeds used for "Sambar" (bean soup which is usually prepared from pigeon pea). Young pods for vegetable. White flower. 9 month old. Jun./Jul. planted.
E78-24-58.8	375m	clay	bulk	yes	yes	Many <i>V. stipulacea</i> plants growing in and around harvested paddy fields.
E78-24-04.2	392m	gravel	individual	no	no	One twining mungbean plant growing among black gram field under coconut trees.
E78-49-00.7	166m	gravel	bulk	no	no	Seeds from Mr. Ramasamy. Sickle harvest, dry, hit and collect seeds.
E78-49-03.8	160m	red sandy	bulk	yes	no	Beside paddy nursery.
E78-52-52.1	132m	sand	bulk	yes	no	Growing in a sorghum field.
E78-52-52.1	132m	gravel	bulk	yes	no	Growing in a sorghum field. Seems to be a wild form of <i>V. aconitifolia</i> . Deeply lobed leaflet type.
E78-52-52.1	132m	gravel	bulk	no	no	Landrace. Growing mixed with sorghum.
E78-52-52.1	132m	gravel	bulk	yes	no	Growing in a sorghum field.
E78-54-57.5	109m	gravel	bulk	no	no	Seeds from market at Nainartalayam shop.
E78-54-44.2	120m	white sandy soil	bulk	no	no	Growing in a sorghum field.
E78-54-44.2	120m	sand	bulk	yes	no	Growing in a sorghum field. Seems to be a wild form of <i>V. aconitifolia</i> . Broad leaflet type. Upper leaf surface light purple.
E78-54-44.2	120m	sand	individual	yes	no	Growing in a sorghum field. Seems to be a wild form of <i>V. aconitifolia</i> . Deeply lobed leaflet type.

Table 3(Continued).

Coll. No.	Coll. Date	Species name	Status	Local Name	Collection Site	Province	Latitude
2009TN68	4-Feb-09	<i>Vigna radiata</i> (L.) Wilczek var. <i>sublobata</i> (Roxb.) Verdc.	wild	Karum (=black) Payaru	Mel Nariyappanur, ca. 30 km NE of Attur	Viluppuram	N11-37-15.5
2009TN69	4-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild	Nari Payaru	Mel Nariyappanur, ca. 30 km NE of Attur	Viluppuram	N11-37-15.5
2009TN70	5-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Nari Payaru	Ottamedu Singalanthapuram village, ca. 5 km SE of Rasipuram	Namakkal	N11-25-24.7
2009TN71	5-Feb-09	<i>Vigna stipulacea</i> (Lamarck) Tateishi	wild		ca. 25 km NE of Namakkal	Namakkal	N11-19-54.9
2009TN72	5-Feb-09	<i>Vigna stipulacea</i> (Lamarck) Tateishi	wild		ca. 10 km NE of Namakkal	Namakkal	N11-16-08.1
2009TN73	5-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		1 km south of Namakal	Namakkal	N11-11-47.1
2009TN74	5-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		1km south of Namakal	Namakkal	N11-11-47.1
2009TN75	5-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		1km south of Namakal	Namakkal	N11-11-47.1
2009TN76	5-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		1km south of Namakal	Namakkal	N11-11-47.1
2009TN77	5-Feb-09	<i>Vigna unguiculata</i> (L.) Walp.	cultivated		1km south of Namakal	Namakkal	N11-11-47.1
2009TN78	5-Feb-09	<i>Macrotyloma uniflorum</i> (Lam.) Verdc.	cultivated		1km south of Namakal	Namakkal	N11-11-47.1
2009TN79	5-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Mochai	1km south of Namakal	Namakkal	N11-11-47.1
2009TN80	5-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		Paramati, ca. 30 km SW of Namakkal	Namakkal	N11-09-37.5
2009TN81	5-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		Mauraddipatti village, 3 km NW of Paramati	Namakkal	N11-10-36.1
2009TN82	5-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		5 km NW of Paramati	Namakkal	N11-11-03.5
2009TN83	6-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild	Nari Payaru	Poonampalayam village, 2.5 km N of Mannach- chanellu, ca. 15 km N of Tiruchirappalli	Tiruchirap- palli	N10-55-42.2
2009TN84	6-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Nari Payaru	Poonampalayam village, 2.5 km N of Mannach- chanellu, ca. 15 km N of Tiruchirappalli	Tiruchirap- palli	N10-55-42.2
2009TN85	6-Feb-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguicu- lata E. Westphal	cultivated		Poonampalayam village, 2.5 km N of Mannach- chanellu, ca. 15 km N of Tiruchirappalli	Tiruchirap- palli	N10-55-42.2
2009TN86	6-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Poonampalayam village, 2.5 km N of Mannach- chanellu, ca. 15 km N of Tiruchirappalli	Tiruchirap- palli	N10-55-42.2
2009TN87	6-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Kumma Payaru	3.5 km N of Mannach- chanellu, ca. 16 km N of Tiruchirappalli	Tiruchirap- palli	N10-55-58.4
2009TN88	6-Feb-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguicu- lata E. Westphal	cultivated	Thatta Payaru	3.5 km N of Mannach- chanellu, ca. 16 km N of Tiruchirappalli	Tiruchirap- palli	N10-55-58.4

Longitude	Altitude (m)	Soil	Seed	Herbarium	Nodule	Remarks
E78-48-28.8	156m	sand	bulk	yes	no	Growing in an abandoned field. The seeds were sold in a shop formerly. Mainly used as a green manure before rice. Seeds eaten after boiled with sugar. Drought and insect tolerant. Decreased after mungbean cultivars came. They cultivate and harvest this plant formerly.
E78-48-28.8	156m	sand	bulk	yes	no	Plenty of <i>V. trilobata</i> growing on harvested sorghum fields. Here they do not eat <i>V. trilobata</i> but used for feeding animals. She told in other place people eat this beans as "Dosai", because she heard this from people came from other area with <i>V. trilobata</i> seeds.
E78-12-55.5	221m	clay soil	bulk	no	no	Growing in a sorghum field. Used only as fodder for cattle. Seeds not sown but naturally appeared. Never seen wild form of <i>V. aconitifolia</i> .
E78-16-56.7	213m	gray clay soil	bulk	yes	no	In a harvested sorghum field.
E78-14-09.5	180m	gray clay	bulk	yes	yes	Paddy edge. Already mostly grazed. Salt affected gray clay paddy.
E78-10-06.1	180m	sand	bulk	no	no	In a mixed pulses field. Long thick stem. No virus. Long branches.
E78-10-06.1	180m	sand	bulk	no	no	Cultivated semi-erect type.
E78-10-06.1	180m	sand	bulk	yes	no	Cultivated prostrate type.
E78-10-06.1	180m	sand	bulk	yes	no	Big pod, like a cultivar.
E78-10-06.1	180m	sand	bulk	no	no	Small seed. Long stem. Drought tolerant.
E78-10-06.1	180m	sand	bulk	no	no	Big pod. Only this crop grown as a mono-culture in this field.
E78-10-06.1	180m	sand	bulk	no	no	Mottled seeds.
E78-01-30.7	130m	sand	bulk	no	no	Growing in a harvested sorghum field. When Pandiyan visited this place on January 12th this year, many plants of <i>V. trilobata</i> were there. Now, farmer harvested sorghum and goat grazed almost all of <i>V. trilobata</i> .
E78-0-34.9	154m	reddish sand	bulk	yes	no	Growing in a harvested sorghum field. Full of <i>V. trilobata</i> plants around the area. Some are infested by yellow mosaic virus. Leaflet sometimes large like mungbean.
E78-00-13.4	155m	sand	bulk	no	no	Yellow mottled virus affected.
E78-41-42.2	86m	sand	bulk	no	no	Growing in a sorghum field. Used for cattle feeding.
E78-41-42.2	86m	sand	bulk	no	no	Sown together with sorghum for human food. Virus severe. Few rain this year, so few <i>V. aconitifolia</i> population established. July sowing. Cowpea and mungbean also sown but not established.
E78-41-42.2	86m	sand	bulk	no	no	Sown together with sorghum. Few plants established because of few rain this year.
E78-41-42.2	86m	sand	bulk	no	no	Sown together with sorghum. Few plants established because of few rain this year.
E78-41-30.7	85m	sand	bulk	no	no	Grown in a sorghum field.
E78-41-30.7	85m	sand	bulk	no	no	Grown in a sorghum field.

Table 3(Continued).

Coll. No.	Coll. Date	Species name	Status	Local Name	Collection Site	Province	Latitude
2009TN89	6-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		3.5 km N of Mannachchanellu, ca. 16 km N of Tiruchirappalli	Tiruchirappalli	N10-55-58.4
2009TN90	6-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild	Nari Payaru	3.5km N of Mannachchanellu, ca. 16 km N of Tiruchirappalli	Tiruchirappalli	N10-55-58.4
2009TN91	6-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		ca. 25 km N of Pudukkottai, along R210	Pudukkottai	N10-32-13.6
2009TN92	6-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated		ca. 25 km N of Pudukkottai, along R210	Pudukkottai	N10-32-13.6
2009TN93	6-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated		ca. 25 km N of Pudukkottai, along R210	Pudukkottai	N10-32-13.6
2009TN94	6-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		in front of seed multiplication center, Annapanai village, ca. 16 km W of Pudukkottai	Pudukkottai	N10-23-51.0
2009TN95	6-Feb-09	<i>Vigna stipulacea</i> (Lamarck) Tateishi	wild	Nari Payaru	Rangeyam village, ca. 25 km SW of Pudukkottai	Pudukkottai	N10-14-21.9
2009TN96	7-Feb-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated		45 km NE of Dindigul, 10 km SW of Manapparai, along R45	Tiruchirappalli	N10-33-59.3
2009TN97	7-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		Velvarkottai village, 11 km NE of Dindigul, along R45	Dindigul	N10-25-14.6
2009TN98	7-Feb-09	<i>Vigna stipulacea</i> (Lamarck) Tateishi	wild	Minnikolai	Velvarkottai village, 11 km NE of Dindigul, along R45	Dindigul	N10-25-14.6
2009TN99	7-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		6 km SE of Dindigul, foot hill of Sirumalai	Dindigul	N10-18-37.9
2009TN100	7-Feb-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated		6 km SE of Dindigul, foot hill of Sirumalai	Dindigul	N10-18-37.9
2009TN101	8-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild	Ramar Kodi	ca. 5.5 km SE of Dindigul	Dindigul	N10-19-16.8
2009TN102	8-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Kallu Payaru	ca. 5.5 km SE of Dindigul	Dindigul	N10-19-16.8
2009TN103	8-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		ca. 5.5 km SE of Dindigul	Dindigul	N10-19-16.8
2009TN104	8-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Mochai	ca. 5.5 km SE of Dindigul	Dindigul	N10-19-16.8
2009TN105	8-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild	Nari Payaru	Kuttur village, ca. 30 km SE of Dindigul, ca. 4 km W of Nattam	Dindigul	N10-14-18.9
2009TN106	8-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Mochai	Kuttur village, ca. 30 km SE of Dindigul, ca. 4 km W of Nattam	Dindigul	N10-14-18.9
2009TN107	8-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Bore(=tasty) Mochai	Kuttur village, ca. 30 km SE of Dindigul, ca. 4 km W of Nattam	Dindigul	N10-14-18.9
2009TN108	8-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Mochai (Manthi Kan(=eye))	Kuttur village, ca. 30 km SE of Dindigul, ca. 4 km W of Nattam	Dindigul	N10-14-18.9
2009TN109	8-Feb-09	<i>Vigna mungo</i> (L.) Hepper	cultivated		Valayapatti village, ca. 65 km SW of Tiruchirappalli, 2 ~ 3 km S of Thuvankurichchi, along R458	Tiruchirappalli	N10-21-14.0
2009TN110	8-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Kolli hills	Namakkal	

Longitude	Altitude (m)	Soil	Seed	Herbarium	Nodule	Remarks
E78-41-30.7	85 m	sand	bulk	no	no	Grown in a sorghum field.
E78-41-30.7	85 m	sand	bulk	no	no	Grown in a sorghum field. A farmer said she eats this legume.
E78-46-39.7	118 m	white sandy	bulk	yes	no	Growing in a harvested groundnut field.
E78-46-39.7	118 m	white sandy	bulk	no	no	Lablab plants grown near the tree in a field. White seeds.
E78-46-39.7	118 m	white sandy	bulk	no	no	Lablab plants grown near the tree in a field. Pale brown seeds.
E78-41-01.9	123 m	reddish sand	bulk	no	no	Growing in a garden in front of seed multiplication building.
E78-39-53.6	114 m	heavy clay	bulk	yes	yes	A large population of <i>Vigna stipulacea</i> growing in a fallow lowland paddy. A farmer (Mrs. Salaiammal) said this plant is used as leaf vegetables, green manure and fodder for cattle (milk yield increase). Young immature seeds eaten raw by human. Mature seeds are fried, eaten and also made into curry.
E78-20-07.0	210 m	gravel	bulk	no	no	Road side dry place. Gravel soil.
E78-03-37.2	268 m	reddish sandy	bulk	no	no	Growing dry road side.
E78-03-37.2	268 m	reddish sandy	bulk	yes	yes	Young pod eaten. Whole plant fed to cattle. Naturally growing around paddy. Mr. Duraisamy's land.
E78-00-08.8	338 m	gravel	individual	no	no	Growing mixed with sorghum.
E78-00-08.8	338 m	gravel	bulk	no	no	Growing mixed with sorghum. Landrace.
E78-00-42.0	325 m	red sandy clay	bulk	no	no	
E78-00-42.0	325 m	red sandy clay	bulk	no	no	Prostrate. Seeds from shop 20Rp/kg.
E78-00-42.0	325 m	red sandy clay	bulk	yes	no	Strange <i>Vigna aconitifolia</i> plant. No name. Naturally appeared. Seems more resistance to disease but some symptom of YMV.
E78-00-42.0	325 m	red sandy clay	bulk	no	no	Mottled seeds.
E78-12-33.7	283 m	sandy clay	bulk	no	no	Not eaten by human, only for cattle.
E78-12-33.7	283 m	sandy clay	bulk	no	no	Seeds from Mr. Muthaih. Deep mottled seeds.
E78-12-33.7	283 m	sandy clay	bulk	no	no	Seeds from Mr. Muthaih. Mottled seeds. Higher price.
E78-12-33.7	283 m	sandy clay	bulk	no	no	Seeds from Mr. Muthaih. Higher yield, more drought resistance.
E78-23-06.6	237 m	red sandy clay	bulk	no	no	Seeds from Mr. V. Alagasan. Local blackgram. Many flowers. Good taste for "idli" and "dosai" (local food made by black gram).
		sand	bulk	no	no	A farmer last year met has brought seeds to the restaurant at Tiruchirappalli. Land race. 5 feet. Small seeds. Kolli Hills. Climbing to sorghum.

Table 3(Continued).

Coll. No.	Coll. Date	Species name	Status	Local Name	Collection Site	Province	Latitude
2009TN111	8-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated			Karur	
2009TN112	8-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		Marapparai	Tiruchirappalli	
2009TN113	8-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		Kulittalai	Karur	
2009TN114	8-Feb-09	<i>Vigna stipulacea</i> (Lamarck) Tateishi	wild		ca. 30 km NE of Tiruchirappalli, along R45	Tiruchirappalli	N11-01-16.9
2009TN115	8-Feb-09	<i>Vigna mungo</i> (L.) Hepper	cultivated		Pasar village, ca. 100 km NE of Tiruchirappalli, ca. 5 km SW of Veppur, along R45	Cuddalore	N11-29-28.4
2009TN116	8-Feb-09	<i>Vigna radiata</i> (L.) Wilczek var. <i>sublobata</i> (Roxb.) Verdc.	wild		Pasar village, ca. 100km NE of Tiruchirappalli, ca. 5 km SW of Veppur, along R45	Cuddalore	N11-29-28.4
2009TN117	8-Feb-09	<i>Vigna unguiculata</i> (L.) Walpers cv-gr. Unguiculata E. Westphal	cultivated		Pasar village, ca. 100km NE of Tiruchirappalli, ca. 5 km SW of Veppur, along R45	Cuddalore	N11-29-28.4
2009TN118	8-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Mochai	Pasar village, ca. 100 km NE of Tiruchirappalli, ca. 5 km SW of Veppur, along R45	Cuddalore	N11-29-28.4
2009TN119	9-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Pani Payaru	Iraiyapur village, ca. 4 km SE of Tindivanam	Viluppuram	N12-12-30.1
2009TN120	9-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated	Pani Payaru	Iraiyapur village, ca. 4 km SE of Tindivanam	Viluppuram	N12-12-30.1
2009TN121	9-Feb-09	<i>Vigna mungo</i> (L.) Hepper	cultivated		Iraiyapur village, ca. 4 km SE of Tindivanam	Viluppuram	N12-12-30.1
2009TN122	9-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		Iraiyapur village, ca. 4 km SE of Tindivanam	Viluppuram	N12-12-30.1
2009TN122.5	9-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		Iraiyapur village, ca. 4 km SE of Tindivanam	Viluppuram	N12-12-30.1
2009TN123	9-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Iraiyapur village, ca. 4 km SE of Tindivanam	Viluppuram	N12-12-30.1
2009TN124	9-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Iraiyapur village, ca. 4 km SE of Tindivanam	Viluppuram	N12-12-30.1
2009TN125	9-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Iraiyapur village, ca. 4 km SE of Tindivanam	Viluppuram	N12-12-30.1
2009TN126	9-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Konakkampattu village, between Gingee and Tindivanam, along R66	Viluppuram	N12-15-10.2
2009TN127	9-Feb-09	<i>Vigna trilobata</i> (L.) Verdc.	wild		Konakkampattu village, between Gingee and Tindivanam, along R66	Viluppuram	N12-15-10.2
2009TN128	9-Feb-09	<i>Vigna aconitifolia</i> (Jacq.) Maréchal	cultivated		Konakkampattu village, between Gingee and Tindivanam, along R66	Viluppuram	N12-15-10.2
2009TN129	9-Feb-09	<i>Vigna stipulacea</i> (Lamarck) Tateishi	wild		Sellapratti village, ca. 30 km NW of Tindivanam,	Viluppuram	N12-17-25.5
2009TN130	9-Feb-09	<i>Lablab purpureus</i> (L.) Sweet	cultivated	Mochai	Aripadi village. 8.7 km NW of Arani	Tiruvannamalai	N12-42-33.9
2009TN131	10-Feb-09	<i>Vigna radiata</i> (L.) Wilczek var. <i>sublobata</i> (Roxb.) Verdc.	wild		Mahedevamalai village, ca. 30 km W of Vellore	Vellore	N12-57-50.1

Longitude	Altitude (m)	Soil	Seed	Herbarium	Nodule	Remarks
		sand	bulk	no	no	A farmer last year met has brought seeds to the restaurant at Tiruchirappalli. Seeds from his relatives' place.
		sand	bulk	no	no	A farmer last year met has brought seeds to the restaurant at Tiruchirappalli. Seeds from Manapparai.
		sand	bulk	no	no	A farmer last year met has brought seeds to the restaurant at Tiruchirappalli. Seeds from Kulithalai.
E78-48-00.9	108m	heavy clay soil	bulk	yes	no	Sorghum field edge. Only young seedlings found.
E79-04-08.2	79m	heavy clay soil	bulk	no	no	Easy shattering. Maturity stage.
E79-04-08.2	79m	heavy clay soil	bulk	yes	no	Large leaf. Thick stem & pod. Like weedy. <i>V. radiata</i> var. <i>sublobata</i> can also grow on heavy clay.
E79-04-08.2	79m	heavy clay soil	bulk	no	no	Local variety.
E79-04-08.2	79m	heavy clay soil	bulk	no	no	Lablab white seeds.
E79-39-50.7	42m	gray loamy clay	bulk	yes	no	Seeds from Mr. Santhnam. Erect type of <i>V. aconitifolia</i> with broad leaflet.
E79-39-50.7	42m	gray loamy clay	bulk	yes	no	Seeds from Mr. Santhnam. Erect type of <i>V. aconitifolia</i> with deeply lobed leaflet. Easy harvest and earlier compared with crawling type. 3 years ago she brought erect type. High yield. Fry with salt and eat - very hard. Boil and eat. From Mailam village she brought. No spray but no insect and disease. No YMV compared with black gram. <i>V. aconitifolia</i> 40Rp/kg (because of confectionary use). Black gram 30Rp/kg .
E79-39-50.7	42m	gray loamy clay	bulk	no	no	Seeds from Mr. Santhnam. Black gram runner type.
E79-39-50.7	42m	gray loamy clay	bulk	yes	no	Seeds from Mr. Devarajan. A little prostrate <i>V. aconitifolia</i> . Oct. end sowing.
E79-39-50.7	42m	gray loamy clay	bulk	no	no	<i>V. aconitifolia</i> basal podding type.
E79-39-50.7	42m	gray loamy clay	bulk	yes	no	Brown seeds.
E79-39-50.7	42m	gray loamy clay	bulk	no	no	Green seeds. Landrace
E79-39-50.7	42m	gray loamy clay	bulk	no	no	Shiny bold seeds.
E79-32-02.9	64m	sandy soil	bulk	no	no	Seeds from Mr. G. Sadaiyan. Groundnut field mixed with <i>V. mungo</i> & <i>V. radiata</i> & <i>V. unguiculata</i> for additional income.
E79-32-02.9	64m	sandy soil	bulk	no	no	Growing on the edge of field. Young pods eaten by human.
E79-32-02.9	64m	sandy soil	bulk	no	no	Wide leaflet. From dried field. Wide leaflet type came recently (2 years ago). Easy to harvest. Higher yield.
E79-25-00.0	84m	heavy clay	bulk	yes	no	Growing on the ridge of paddy field. Rice transplanting is on going. Mr. Thandarayan.
E79-13-03.3	172m	sand	bulk	no	no	Very dry sandy area. Seeds from Mr. Govindasamy.
E78-58-02.5	263m	sand	bulk	no	no	Growing in a sorghum field.

Table 3(Continued).

Coll. No.	Coll. Date	Species name	Status	Local Name	Collection Site	Province	Latitude
2009TN132	10-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Mahedevamalai village, ca. 30 km W of Vellore	Vellore	N12-57-50.1
2009TN133	10-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Mahedevamalai village, ca. 30 km W of Vellore	Vellore	N12-57-50.1
2009TN134	10-Feb-09	<i>Vigna stipulacea</i> (Lamarck) Tateishi	wild		Mahedevamalai village, ca. 30 km W of Vellore	Vellore	N12-57-50.1
2009TN135	10-Feb-09	<i>Vigna radiata</i> (L.) Wilczek	cultivated		Mahedevamalai village, ca. 30 km W of Vellore	Vellore	N12-57-50.1

Longitude	Altitude (m)	Soil	Seed	Herbarium	Nodule	Remarks
E78-58-02.5	263m	sand	bulk	no	no	Green seeds.
E78-58-02.5	263m	sand	bulk	no	no	Brown seeds.
E78-58-02.5	263m	sand	bulk	no	no	Growing in a sorghum field.
E78-58-02.5	263m	sand	bulk	no	no	Green seeds and brown seeds mixed.



Photo 1. A “Cultivated Type” of moth bean (TN119) shows erect short main stem. Farmers prefer this type because of easy harvesting.



Photo 2. A wild form of moth bean like plant (TN67) found in Viluppuram Province. It grows in a sandy sorghum field with *V. trilobata* (TN65).



Photo 3. Another wild form of moth bean like plant (TN66) which has broad purplish leaflet growing sympatric with TN67 (see Photo 2).



Photo 4. Unlike mungbean which is usually grown on dry land, black gram is frequently cultivated on the ridge or near the paddy field.



Photo 5. Pods of *Vigna stipulacea* (TN35). This species prefers wet habitats and is frequently found in and around heavy clay paddy fields.



Photo 6. A farmer eating immature seeds of *V. stipulacea* (TN95). It is used as leafy vegetable, green manure and fodder for cattle. Mature seeds are eaten fried and also made into curry soup.



Photo 7. A long tap root of *Vigna trilobata* (TN69) growing on sandy soil beside farmers house suggesting high drought tolerance. However, no nodules are found.



Photo 8. Big cultivar-like pods of *V. trilobata* suggesting some extent of domestication. Cultivation and human consumption of *V. trilobata* are confirmed in Tamil Nadu.