

**Trip Report: Expedition to Georgia and Armenia  
to Collect Temperate Fruit and Nut Genetic Resources  
15 September – 20 October 2006**

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## Expedition Summary

On September 15, 2006, Joseph Postman (plant pathologist & pome fruit curator, ARS National Clonal Germplasm Repository, Corvallis, Oregon) and Ed Stover (research leader & curator, ARS National Clonal Germplasm Repository, Davis, California) traveled to Tbilisi, Georgia where they spent 16 days collecting cultivated varieties of assorted temperate fruit and nut crops and seeds of wild crop relatives from three provinces in the central and eastern parts of the country. Their host and expedition companion was Dr. Marina Mosulishvili, senior botanist at the Georgia Academy of Science Institute of Botany and Georgia State Museum in Tbilisi. On October 2, they traveled to Yerevan, Armenia and spent 8 days traveling in the central and southern parts of the country with botanist Dr. Anush Nersesyan from the Armenia National Academy of Sciences Institute of Botany in Yerevan also collecting seeds of wild fruit and nut crops. An additional 8 days was spent visiting Armenian Agricultural Institutes, Fruit Crop Genebanks and private farms to collect cuttings of traditional fruit and nut varieties for conservation and crop improvement in the U.S. Nearly 300 samples were collected in both countries during this 5 week expedition.

In Georgia, 97 cultivated fruit and nut varieties and 53 wild seedlots were collected. Significant cultivated samples included 6 *Cydonia* (quince), 16 *Ficus* (fig), 9 *Juglans* (walnut), 5 *Mespilus* (medlar), 22 *Prunus* (almond, apricot, peach, plum), 4 *Punica* (pomegranate), 8 *Pyrus* (pear) and 20 *Vitis* (grape) varieties. Significant wild collected samples in Georgia included 2 *Castanea* (chestnut), 5 *Cornus* (Cornelian cherry), 3 *Humulus* (hop), 6 *Pistacia* (pistachio), 4 *Pterocarya* (wingnut), 4 *Pyrus* (pear), and 4 *Vitis* (grape) seedlots.

In Armenia, 61 cultivated fruit and nut varieties and 76 wild seedlots were collected. Significant cultivated samples included 6 *Cydonia*, 3 *Ficus*, 16 *Prunus*, 11 *Punica*, 6 *Pyrus* and 11 *Vitis* varieties and important wild seedlots of *Mespilus*, *Pistacia*, *Pyrus*, and *Vitis*.

This expedition was funded by the USDA-ARS Plant Exchange Office in Beltsville, Maryland. Logistical support in Armenia was provided by the Center for Agribusiness and Rural Development (CARD), an NGO in Yerevan, Armenia. Financial support for lodging, translator and ground transportation in Armenia was provided by the Yerevan office of the USDA Foreign Agriculture Service. Material transfer agreements were established between the USDA Agricultural Research Service (ARS) and the Georgia Academy of Science Institute of Botany, and between the USDA-ARS and the Armenia Academy of Sciences Institute of Botany in accordance with the Bonn guidelines on access to genetic resources and fair and equitable sharing of benefits.

## Map of Sample Collection Sites



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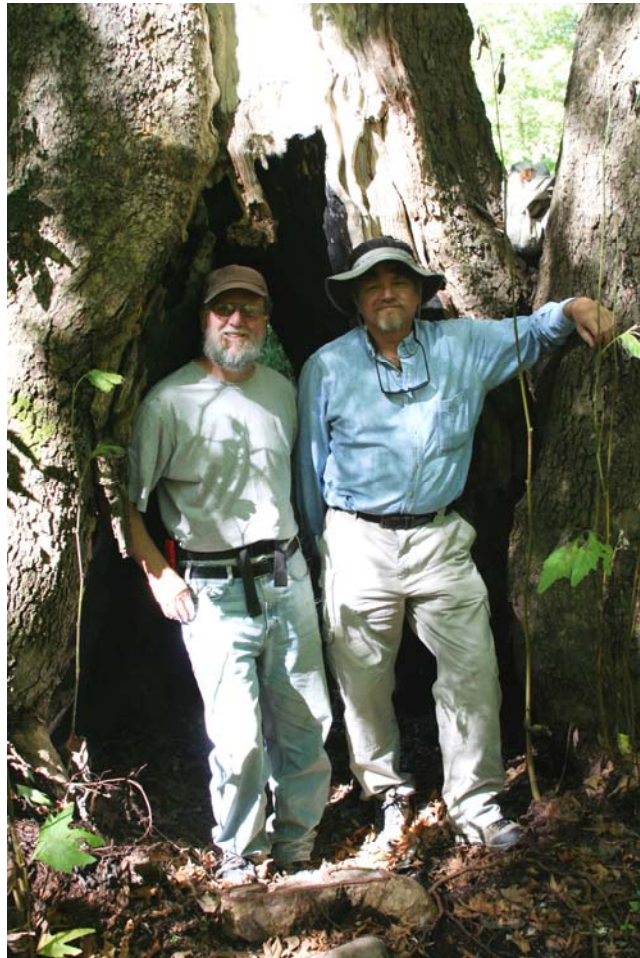
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**Postman & Stover pose in an old, hollow *Platanus orientalis* tree at the Shigahogh Nature Preserve in southern Armenia**

## Itinerary and Collection Activities - Georgia

### Friday 9/15 – Saturday 9/16

Travel from U.S. to Tbilisi, Georgia

### September 16 to September 20 – Day trips in and around Tbilisi.

Lodging at David's Apartment in downtown Tbilisi for \$50/night per person.

### Sunday 9/17

Met with Marina, and finalized expedition plans; changed money, visited Tbilisi Botanic Garden.

### Monday 9/18

Visited Georgia Institute of Horticulture, Viticulture and Oenology in Tbilisi. David Maghradze and Nugzar Tsertsvadze (right) helped select 20 traditional grape cultivars to collect. We also met with Institute director Teimuraz Dekanosidze and discussed the value of cooperation and conservation of germplasm. The director indicated the need for some sort of agreement. It was agreed that we would send



them back the accessions testing free of standard viruses and would work to get funding for SSR fingerprinting of the Georgian grape collection.

Discussed aspects of grape production in Georgia. In 2004 reported to be 36,000 ha. In Soviet times had been as high as 140,000 ha. Plan is to increase to 90,000 ha. 96-97% of grapes are for wine production and 95% of area is in indigenous grapes. A few areas have a good reputation for Cabernet Sauvignon and Chardonnay and are among the recommended grape varieties for planting. It is required by law that all grapes be grafted (to reduce buildup of insect), onto one of ten recommended types of stock, with 5BB most widely used. Phylloxera was introduced into Georgia (in the 19<sup>th</sup> century?) (around 1975), shortly after it arrived in France?

Discussed other fruits in production in Georgia. All together number ~40,000ha down from Soviet times high of 140,000 ha. Primarily apple, pear and peach, which are largely indigenous varieties (300 apple and 350 pear varieties). In walnuts, they primarily grow local varieties that are well-received in Turkey and Germany, but primarily due to low price. Almond and walnut are grafted onto seedlings of commercial-type nuts. When asked about fig pollination, it appeared that all figs are likely Smyrna types. Toured the vineyard in which 301 Georgian varieties had been planted. They were primarily collected by Nugzar Tsertsvadze, who worked on distinguishing varieties using the hairs on the undersides of leaves. The planting was made in 2003 using IPGRI funding and is arranged by region with ten vines per variety.



## Tuesday 9/19

Returned to Institute of Horticulture, Viticulture and Oenology. Collected grape cuttings with Maghradze and Tsertsvadze. Collected *Juglans*, *Ficus* and *Punica* selections with walnut specialist Nugzar Shengelia. Examined apple and pear selections with fruit specialist Kuri Dzeria. Traveled about 30 km to NW with Nugzar Shengelia to collect scions and nuts of walnut selections.



Follow up items:

- Send ~10 seedless grapes to Magradze.
- Send assortment of blueberry cultivars adapted to different climates.
- Send cuttings of pistachio, pecan and parthenocarpic figs to Shengelia.



## Wednesday 9/20

Picked up David Magradze at Institute and traveled to Gori, birthplace of Joseph Stalin. Bought peaches and Cornelian Cherry germplasm (below) at fruit market. Visited Institute fruit evaluation field station at Skra, about 10 km from Gori. Local expert Temur Kakashvili joined us and traveled up nearby river valley to village of Koshkebi. We collected *Punica*, *Ficus* (left), *Prunus*, *Cydonia* and *Diospyros* varieties from local gardens. A village man invited us to join his family for lunch. We collected two grape cultivars from the Institute planting along road

back to Skra. This planting, from about 1933, contained 180 traditional Georgian grapes. Walked around Skra station with fruit specialist Mzia Baiadze and we examined and collected specimens of *Malus*, *Mespilus*, *Cydonia*, and *Prunus*. We visited a replicated trial of local peach cultivars with Lia Baliashvili and collected budwood from several that are reported to be distinctive (no fruit was present).





**September 21 to September 27 – Seven day, six night Expedition to Kakheti Province.** Three nights lodging in village of Shilda (near Telavi) at home of Geno and Natala. Three nights lodging at Nellie's Bed & Breakfast Hotel in Dedoplis Tskaro.

#### **Thursday 9/21**

Traveled from Tbilisi to Saguramo. Met Marina's brother Nodar who arranged a local guide to explore a riparian forest in the Korogi preserve, along the Iori River, for wild *Vitis sylvestris*. About 10 old vines were located, only a few fruit were found on 2 vines. *Humulus* and *Physalis* samples were collected at the same location. We visited Nodar's nearby vineyard and he explained about the 4 enemies of grape growing in Kakheti:

1. Tamerlane
  2. Shah Abaz II of Iran
  3. Edvard Sheverdnadze
  4. Gorbachev who enacted prohibition in the USSR from 1985-87 to eliminate excessive use of vodka, but also banned wine
- Marina added a 5<sup>th</sup>: Vladimir Putin who recently denied entry of Georgian wine into Russia.

Nodar took us to a nice barbecue restaurant. We were introduced to the pickled inflorescence of *Staphelia pinnata*. Enjoyed a fine bottle of Saparavi and local specialty Kvisi white wine. Arrived at Geno & Natala's house well after dark and another dinner was served.

#### **Friday 9/22**

Visited Institute of Horticulture, Viticulture and Oenology station in Telavi. Grape expert Kakhe Gogishvili helped us collect two rare grape varieties from the station's extensive *Vitis* germplasm collection. Met local grape and wine authority Guram Batiashvili who accompanied us to Tsinandali estate and wine museum (right). Returned to Shilda village and collected seeds of *Staphelia* and cuttings of *Ficus*, *Prunus*, *Mespilus*, and *Pyrus* from the gardens of Geno and his neighbors.



#### **Saturday 9/23**

Geno fed us Kingali for breakfast and then accompanied us to a nearby river gorge to collect *Pterocarya*. We also collected *Castanea*, *Crataegus*, *Fagus*, *Humulus*, *Juglans*, and *Mespilus*. Returning to Shilda we collected a *Cydonia* cultivar from the yard of the village chacha distillery and nuts from an enormous chestnut growing in a yard. After lunch Geno took us a few kilometers east to another forest valley. Large *Pterocarya* trees had no seed within reach, but we came away with a few *Juglans*, *Corylus* and *Diospyros* seeds.

## Sunday 9/24

Geno prepared Kingali again for a going-away breakfast. We visited Lagodeki Nature Preserve, hunted for *Vitis sylvestris* near the Azerbaijan border, and collected more *Pterocarya* (below) before continuing on to Dedoplist Tskaro where we will stay for 3 nights.



## Monday 9/25

We met with the Vashlovani Preserve director and staff for lengthy discussions but were unable to get permission to collect in the Vashlovani Nature Preserve, a semiarid area with unique geological, botanical and wildlife resources. Wildlife biologist Amiran Kodiashvili, vice director of the Vashlovani Preserve accompanied us to the preserve. We were able to collect seeds of wild *Pistacia*, *Pyrus*, and *Punica* outside of the preserve boundaries. We walked into



the preserve itself and were surrounded by numerous large *Pistacia mutica* trees (below), but see no *Punica* or *Pyrus*. We concluded that there is little reason to arrange permission to collect from this site in the future as the plants outside the preserve border likely represent the same gene pool. Before returning to Dedoplist Tskaro, we stopped at the old Institute of Botany Field Station near Vashlovani (village of Kasris Tskali) where Marina's elderly colleague Merab Khachidze gave us seed and cuttings of rare species *Pyrus sachokiana* and *Pistacia vera*.



**Tuesday 9/26**

We picked up a guide named Tamas, a former Vashlovani ranger, in Dedoplis Tskaro. He accompanied us to Chachuna, another arid region not far from Vashlovani. The Chachuna Sanctuary includes a riparian forest along the same Iori River where we found *V. sylvestris*. We also explored a wild area of forest to the north and an area bordering a large reservoir of the Iori. *Pistacia mutica* is the main catch of the day, accompanied by a few seeds of *Cotinus*, *Pyrus*, *Quercus* and *Juniperus*.

**Wednesday 9/27**

We collected cultivated fruits from gardens in the town of Dedoplis Tskaro before heading back to Tbilisi. Enroute, we stopped at Marina's empty family home in the village of Arashenda and took cuttings from fruit trees that were planted by her father in the 1970s.

**Thursday 9/28**

Stayed in Tbilisi and extracted and cleaned seed, packed cuttings, prepared inventories and visited the phytosanitary office.

**Friday 9/29**

Finished cleaning seeds, picked up phytosanitary certificate and shipped a box of Georgia germplasm to Beltsville by Federal Express. In the afternoon we met with Sean Carmody from the USDA FAS office in Yerevan who briefed us about the situation in Armenia. He was visiting Tbilisi for a few days.

**Saturday 9/30**

Day trip to Borjomi to search for wild *Vitis sylvestris* (left) and *Pyrus salicifolia* (right). We were successful on both counts.

**Sunday 10/1**

Prepared to leave Georgia and begin our exploration in Armenia. We visited the Turkish baths in Tbilisi, shopped for souvenirs and dined at Nodari's Kingali restaurant where we were served nearly everything on the menu! Ed presented Nodari with a bottle of wine that he had made and carried from California. It was opened and enjoyed by all.

**Monday 10/2**

Marina and Sandro drove us to the Armenia border (about 2 hours) where we were met by driver Armen in a car from the Center for Agribusiness and Rural Development (CARD).

## Itinerary and Collection Activities - Armenia

### October 2 to October 4 – Lodging in Yerevan

#### Monday 10/2 (continued)

CARD Driver Armen took us to Yerevan, Armenia (another 3 hours), along the way we collected *Vitis sylvestris* in the Alaverdi gorge. In Yerevan we checked into the Congress Hotel where we will stay courtesy of USDA-FAS and CARD.

#### Tuesday 10/3

Met with Sean Carmody and then with Levon Gyulkhasyan at the USDA-FAS office to discuss Foreign Agriculture Service activities in Armenia and status of USDA funding for Armenian genebanks. Then met with Gagik Sardaryan, deputy director of CARD to finalize logistical arrangements that CARD will provide for our expedition and learn about CARD activities in Armenia, especially related to grape growing and wine making. After lunch a CARD vehicle took us to the Armenia Institute of Botany where we met with Anush Nersesyan, Natalya Rukhkyan, Zhirair Vardanyan and Michael Oganessian. We were accompanied by CARD translator Lilia Maranjyan, however Anush, Natalya and Michael all have good English skills. Discussed plans for expedition, opportunities for future collaboration and difference between “Material Transfer Agreement” and “Permission to Collect” from Ministry of Nature Protection. Anush had lined up a permission document, but it only listed 5 genera. We will not be able to remove wild seeds of other genera from the country. We were introduced to senior botanist Eleonora Gabrielyan, who has had a long career studying wild relatives of fruit crops, especially pome fruits.

#### Wednesday 10/4

Daytrip to Khosrov Nature Preserve, about 50 km SE of Yerevan with Anush Nersesyan (right with *Pyrus salicifolia*). We were welcomed to the preserve by director Samvel Shaboyan at the headquarters in Vedi. Shaboyan sent a guide named Hamlet to accompany us. We collected *Pyrus salicifolia*, and two species of *Prunus*. An interesting large-fruited orange hawthorn (*Crataegus pontica*) has very nice tasting fruit, similar to a small apple in flavor and texture.



### October 5 to October 10 – Six day five night Expedition to Southern Border of Armenia

#### Thursday 10/5

We traveled 100 km SE from Yerevan to Yeghegnadzor. During a mid-day stop in a river gorge leading to the village of Noravank, seeds and cuttings of a *Morus nigra* cultivar were collected outside a café. In the afternoon we traveled up the gorge of the Eghegis River and found what appear to be landraces of *Prunus divaricata* and large fruited *Pyrus salicifolia* hybrids. The prevalence of diverse forms of *P. divaricata* with fruit colors ranging from bright yellow to dark



red, and many *Malus* and *Pyrus* trees in a small plateau high above the gorge suggested to us that this may have been a settlement in ancient times where either fruit trees were planted, or naturally occurring trees were protected. We spent the night in a private home (bed & breakfast) in Yeghegnadzor.

### Friday 10/6

Departed Yeghegnadzor and stopped at the USDA Goat Improvement Project Office so our driver could get his travel papers stamped. Along the main road we collected seeds of *Eleagnus* (*angustifolia*? AM-187) from trees planted as a hedgerow, and seeds of wild *Prunus fenzliana* (AM-188 Right) before continuing SE toward Kapan. South of Goris in Syunik Marz the road winds along switchbacks where we stopped to collect wild *Pistacia* (AM-191) and *Punica* (AM-192). About 50 km before Kapan, the road winds close to the Azerbaijan border and signs warned about land mines in certain places. We carefully collected a wild medlar sample (AM-196) in this region. Lodging was at the same old Soviet era hotel in downtown Kapan where Joseph had stayed in 2002 while traveling with Paul Meyer and Alan Whittemore.



### Saturday 10/7

Anush's colleague Vladik Martirusyan, who will be our guide for the day, met us at the hotel for breakfast. He was formerly an official with the local forestry bureau and is now a director of a nature protection NGO called the Critical Ecosystem Partnership Fund. Our first stop was at a house or dacha at Norashenik Village not far from Kapan, that is used as an office by Vladik's organization. There were many fruit trees in the yard and we collected cuttings from cultivated pear (AM-199), quince and medlar (AM-197) trees. The pear was self-rooted and was said to have small fruit that ripens early. It is propagated in the village by digging root suckers. There were two medlar trees, said to be the same variety, but one with fruit considerably larger than the other. Vladik explained that the tree with larger fruit was grafted onto quince rootstock, and the tree with smaller fruit was grafted onto medlar (below – fruits from both trees).





We spent the day in two valleys of the Chanachi Forest that were lush with deciduous trees and shrubs, collecting seeds of wild *Pyrus*, *Malus*, *Juglans*, *Mespilus*, and *Humulus*. While we collected germplasm, Vladik collected wild mushrooms which he roasted over coals in a camp fire to supplement our lunch. At the end of the day he consulted with local villagers who led us to a site with rare wild *Vitis sylvestris* vines that yield a generous supply of seeds. In the evening, Vladik took us to a riverside restaurant south of Kapan where his afternoon mushroom collection made a nice addition to our evening meal. Lodging was again at the hotel in Kapan.

### Sunday 10/8

Traveled from Kapan to Shigahogh Nature Preserve. Stopped en route to collect a wild grape. In Shigahogh Village we visited the Nature Preserve office, met with the director (Ruben \_\_\_\_ ) and picked up guide Manvel. On the way into the preserve we collected *Pyrus salicifolia* and *Prunus fenzliana* in an arid region. Manvel took us to an old *Platanus* grove in a riparian forest, and we meet an old man named Hajk who operates a nursery and grows *Juglans* and *Platanus* seedlings. Hajk invited us to his nearby home in Nerkin Hand Village for lunch. We collected cuttings of a pear and several pomegranate cultivars in his garden after lunch, then traveled about 20 kilometers to the old abandoned village of Hand (below). During Soviet times all of the people from Hand were relocated, leaving behind their homes, gardens and orchards. Many apple and pear trees were perhaps 100 years old and obviously grafted. Scions were collected from several unique types. Another wild grape was collected on a north-facing ridge as we returned to Shigahogh Village. From there it was about an hour drive south to Meghri where we spent the first of two nights at the private hotel of Marieta & Misha Azatyan. (Old Hand Village left, fruit from feral quince trees right).



### Monday 10/9

We met with Anush's colleague Suvik to get suggestions for places to find species of interest, particularly *Prunus nairica* and wild pomegranate. First we traveled west along the Iranian border to Agarak. A local guide helped us find a population of *Prunus nairica* (AM-232) shrubs on an arid, rocky hillside just north of the town. *Prunus nairica* is an almond relative very similar to *P. fenzliana*. We also collected a few seeds from the very small-fruited *Prunus microcarpa* (AM-234) and from *Jasminum nudiflorum* at the same site

We returned to the border road and traveled east to the village of Shvanaidzor where we picked up another guide to help locate wild pomegranate. He took us to several locations, one of which was an ancient village. All of the pomegranate plants we encountered seemed to be either

cultivated or feral. We found several samples of *Pistacia mutica*, *Ficus carica* (possibly wild), and additional *Prunus* which we are uncertain whether they are *P. nairica* or *P. fenzliana* in this arid subtropical southern tip of Armenia. Although our search for true wild *Punica granatum* was not successful, our guide, Hrant, took us to his home in Shvanaidzor and shared cuttings from several interesting local pomegranate cultivars growing in his orchard. The pomegranates ranged in color from almost pure yellow to bright red, and were referred to as either sweet to sour. We then visited his nearby home and collected fig and quince cuttings from his garden. Quince cultivars, like the pomegranates, were categorized as either sweet (Kaghtsr) or sour (Ttvash). We returned to Misha and Marieta's home for dinner, and spent the evening extracting and cleaning seeds on the outside patio as our hosts peeled persimmons from their garden and hang them to dry (left – driver Ashot and Joseph under drying persimmons).



### **Tuesday 10/10**

Before embarking on the long ride back to Yerevan, we spent an hour with Misha in his garden and collected cuttings from loquat (*Eriobotrya japonica*), persimmons (*Diospyros kaki*), pomegranates, and pear (*Pyrus communis*). We also stopped at Suvik's office to thank him for his help. In the mountains north of Meghri we stopped in a deciduous forest to collect seeds from wild apple (*Malus orientalis*), *Pyrus salicifolia*, and a maple species (*Acer hyrcanum*) with beautiful

fall color. As we passed through Kapan, Vladik met us and went with Ashot to purchase gasoline for the vehicle while we walked through the street market. We stopped for a memorable lunch at a stream-side restaurant about 100 km north of Goris where we selected live local trout from holding pens that were then cooked for us. We returned in the evening to our familiar lodging at the Congress Hotel in Yerevan.

### **Wednesday 10/11**

Our translator Lilia set up meetings with fruit specialists from the Center for Viticulture, Wine-making and Fruit-growing. Contacting these individuals was not easy, because the Center is only open one or two days a week and the researchers do not all have office phones. They must be reached at their homes, or on their personal mobile phones, or through intermediate contacts or family members.

We met with Dmitri Beketovski, a fruit tree specialist whose parents were also well known fruit breeders and authors of illustrated monographs on Armenian fruit varieties. Beketovski is very discouraged by current conditions and by the loss of most of the country's government fruit

collections during privatization. He agreed to meet with us on Friday and take us to visit some fruit collections.

We met with Gagik Melyan, a grape specialist who oversees a grape breeding program, a grape germplasm collection, and a rootstock evaluation project. He received phylloxera resistant rootstocks that Joseph sent to the Ministry of Agriculture in 2003. Melyan agreed to meet us on the following Monday to visit his collections and research plots.

We met with Karen Poghosyan, a senior grape specialist and plant physiologist, now mostly retired. He was Melyan's professor, and did important work on cold hardiness. He told us about traveling to various international meetings during Soviet times, and even to a conference in the United States once. He worked for a time on cold hardiness in Japan with Dr. Sakai about 30 years ago.



#### **Thursday 10/12**

The morning was spent cleaning and packaging non-prohibited seed and plant samples so that they could be taken to the quarantine office for a phytosanitary certificate. In the afternoon Ed met with Avag Harutyunyan, who is a professor of viticulture at the Agrarian University and President of the Armenian Association of Winemakers, at the CARD office while Joseph took a CARD vehicle and picked up Natalya and Anush to visit the quarantine office.

Harutyunyan, told Ed that he has studied 600 different Armenian grape varieties but only about 50 are well characterized. 'Areni' is the most important grape type for wine, but rather than being a single genotype, at least 5 varieties and 70 clones are called by this name. He is very interested in studying these varieties and clones, determining their relationships and establishing which are best for wine. He described the most important grape varieties, as a guide for us to determine what to collect.

The trip to the quarantine office was frustrating. We traveled to the office near the airport, but the quarantine activities had been moved. We were directed to an office at the north end of Yerevan, but were unable to find it. Natalya contacted the office by phone, but by then it was too late in the afternoon for them to see us. Natalya took our samples and will deliver them tomorrow while we are off with Dmitri Beketovski.

#### **Friday 10/13**

We traveled with Dmitri Beketovski to a remaining plot of apricot in the site of an experiment station. These were local apricot cultivars collected by a former scientist at the institute, Edvard Morikian. Unfortunately there is no map, but numbers are painted on some of the trees and we were able to select a few distinctive apricot varieties. We were told that the most widely grown apricot in Armenia is 'Yerevanian', and that "there is no better apricot in Armenia and perhaps in the world."

We traveled to a village nearby, and Beketovski introduced us to a local man, Robert Asatryan, who had taken possession of an orchard planted with diverse almond genotypes. Beketovski (right in almond orchard) told us that most experimental plantings were removed from the privatized research plots, but many of his father's almond trees remain on this site near the



village of Vanand (near Turkish border). Asatrian led us through his plots and we collected budwood from several of the most distinctive selections. It was revealed that these are not local varieties, but a cross between two accessions (Nikitski 1 and Nikitski 2) made at the Nikitski Botanical Garden in the Ukraine by Dmitri Beketovski's father Alexi Nikolai Beketovski.

On our return to the city, Dr. Beketovski led us to a fig tree which had survived in Yerevan, where winters are too cold for routine fig production. He also arranged for us to visit the private orchard of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan. We collected several samples of cultivated varieties of sweet cherry, apricot, quince, walnut, pear, fig and mulberry in Hayrapetyan's gardens.

### **Saturday 10/14**

Herbarium vouchers were taken to the FedEx office and shipped to Beltsville. Joseph met with Anna Tadevosyan, her colleague Albert Hofsepian, and a graduate student named Khachik at the Hydroponics Institute. Tadevosyan had visited the Corvallis genebank in 2004 to attend the ISHS hop symposium. We observed several hop cultivars growing at the institute that had been introduced from Corvallis. Tadevosyan and Hofsepian took Joseph on an excursion 25 kilometers east of Yerevan to visit the 2000 year old Garni Temple (center – with old pear tree), the only remaining example in Armenia of Roman influenced architecture from the 1<sup>st</sup> century AD. An earthquake destroyed the temple in 1679 and it was reconstructed between 1965 and 1975. We collected hop germplasm in a canyon below the temple (right), and purchased walnuts from a street vendor along the road to Yerevan (left).



### **Sunday 10/15**

A day of rest and shopping at the huge weekend flea market (vernissage).

### **Monday 10/16**

We traveled with Gagik Melyan to his plot of diverse indigenous grapes in the Armavir region outside of Echmiadzin, near the village of Yeraskhahum. He helped us to select 8 varieties to

collect, including ‘Voskehat’ which is thought to be the oldest Armenian grape. We were told that ‘Voskehat’ was planted by Noah (Noy) after his ark landed on nearby Mount Ararat.

In the afternoon we traveled to Idjevan in NE Armenia and visited a rootstock trail and variety collection. This is the site where phylloxera resistant rootstocks previously sent by Joseph are planted. This is the only region in Armenia where it is legal to plant imported grape material, as phylloxera is present here but not in other major growing regions. (right – Gagik Melyan collects grape cuttings for us).



### Tuesday 10/17

The entire day is devoted to cleaning samples, packaging them, and cataloguing data.

### Wednesday 10/18

A visit to the Armenian Institute of Botany:

We met with Estella Nazarova and discussed opportunities for collaboration. She has a student, Nina Stepanyan, who is working on caryotyping wild *Punica* accessions.

Joseph met with pear specialist Janna Akopian and reviewed herbarium specimens of many *Pyrus* species that have been described in Armenia. Akopian had examined several vouchers that Anush gave her from our trip to southern Armenia. She determined that sample AM-261 from the mountains north of Meghri, which we listed as *P. salicifolia* is probably *P. gergerana*. She said *P. gergerana* is close to *P. syriaca* and *P. zeddeana*, but the leaf base of *syriaca* is more rounded and this sample has more pubescence which places it in *gergerana*. One of our pear samples from the “medieval garden” near Yeghegnadzor (see 5 October), which appeared to a *P. salicifolia* hybrid (AM-185) was determined by Akopian to be *P. hajastana*. She said it has leaves that are more lanceolate and wider at the middle than *P. salicifolia*, and also differed in the amount of serration. Another sample we had collected at the same location (AM-186) with much larger fruit and much wider leaves than *P. salicifolia* was determined to be *P. acutiserrata* Gladkova. She said that this species is pubescent when young, but glabrous when older and in fruit. Additional herbarium samples were also examined including:

- *P. daralaghezi* and *P. elata*, which are both intermediate between *P. caucasica* and *P. syriaca*. They differ from each other based on leaf size and leaf margin.
- *P. georgica* and *P. hajastana* which are both similar to *P. salicifolia*.
- *P. hircana* and *P. grosheimii* which are similar to *P. caucasica*.
- *P. Fedorovii* which is a very narrow leaf form of *P. salicifolia*.
- *P. medvedevii* which is a large leaf *salicifolia* type.

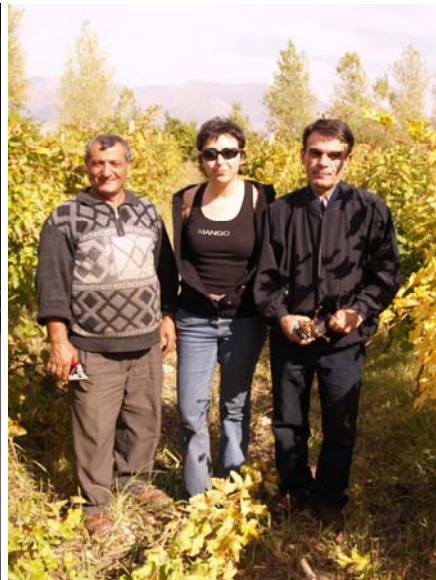
Natalya arranged to have our material examined for a Phytosanitary certificate.



## Thursday 10/19

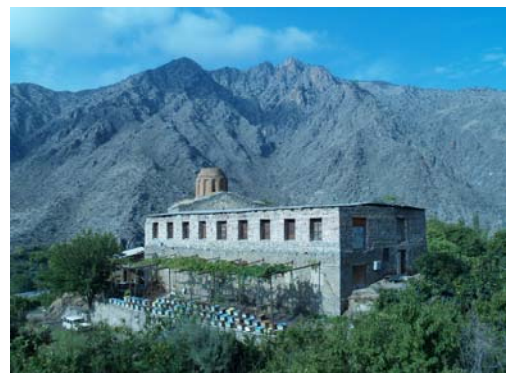
Joseph delivered remaining materials to FedEx office for shipment to the US.

Ed visited to Vyad Zor and toured a leading winery in the Areni wine district with Gagik Melyan and Natalya Rukyan. Avag Harutyunyan arranged a meeting with a local viticulturist, Levon Hakobyan, who has long worked with Areni and has identified numerous clones. Levon considers there to be 7 types of Areni, including the standard with small clusters of medium sized berries, a “bird’s eye” variety with tiny fruit very loose on the cluster, a somewhat larger cat’s eye clone, a very elongate clone, and a large berries clone with very large clusters. This large berry, large yielding clone is the subject of some controversy, as it is a favorite of some wineries and the only Areni variety excluded by others. We visited Levon’s vineyard and collected the standard Areni (AM-299), the very productive and controversial large-berried Areni (known as Tozot, AM-300)), and a disease-resistant version of the Voskehat grape (AM-301) we had previously met as the grape which Noah carried on his ark and planted after landing on Mt. Ararat.



## Friday 10/20

Postman and Stover return to the U.S.



# Appendix 1a – Material Transfer Agreement between Armenia and United States.

**Material Transfer Agreement**  
between the  
**U.S. Department of Agriculture**  
**Agricultural Research Service**  
and the  
**Republic of Armenia**  
**Armenia Academy of Sciences**  
**Institute of Botany**

This Material Transfer Agreement (MTA) is made and entered into, by and between the U.S. Department of Agriculture, Agricultural Research Service, (hereinafter referred to as "USDA/ARS"), and the Republic of Armenia, National Academy of Sciences of Armenia, Institute of Botany (hereinafter referred to as "NAS/IB").

Recognizing the importance to humanity of protecting, utilizing and conserving plant genetic resources for present and future generations, the Parties hereto have signed the present MTA to support collaborative research involving the collection, exchange and preservation of plant genetic resources. Collaborations include, but are not limited to joint seed collections in Armenia by Armenian and US scientists and seed collections in Armenia by exclusively Armenian scientists.

**Collaborators:**

Zhirair Vardanyan  
Institute of Botany  
National Academy of Sciences of Armenia  
1 Achanyan str.  
375063, Yerevan  
Republic of Armenia

Edward J. Garvey, Ph.D.  
USDA/ARS  
National Germplasm Resources Laboratory  
10300 Baltimore Ave.  
Beltsville, MD 20705  
U.S.A.

This MTA is in accordance with the *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization*.

Samples of the plant genetic resources and associated documentation collected through this collaboration will be shared with the US collaborator.

Samples of the collected germplasm and associated documentation will be equally shared with the Institute of Botany for their research and the Armenia National Plant Germplasm System.

The US portion of the germplasm and documentation will be deposited in the US National Plant Germplasm System, where the accessions will be conserved and made available to scientists worldwide for use in research, breeding, and training.

USDA/ARS agrees to the following conditions for germplasm and associated documentation provided through this collaboration.

- a. USDA/ARS will not claim ownership over the materials in the form received, or seek intellectual property rights over that germplasm in the form received, or over related documentation.
- b. USDA/ARS, upon the request of NAS/IB, will make available the names and addresses of persons to whom the NPGS distributes the germplasm.
- c. USDA/ARS, upon the request of NAS/IB, will notify any subsequent persons or institutions to

whom the NPGS provides samples of the germplasm that they are not to claim ownership or seek intellectual property rights over the germplasm in the form received, or over related information.

The benefits to Armenia from this collaboration are:


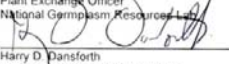
- a. Most plant genetic resources collected through this collaboration will be conserved in the US NPGS in the long-term and medium-term germplasm storage facilities of the US NPGS, an internationally recognized genebank. Samples of this germplasm will be provided to the National Genebank of the Republic of Armenia or other designated institution, upon request by an appropriate official of the government of Armenia.
- b. All funds needed to support this collaboration are provided by the USDA/ARS National Germplasm Resources Laboratory, according to the approved budget.
- c. Professional associations between the Armenian and US scientists will be strengthened and may result in additional collaborations, opportunities for advanced training, and shared scientific publications.
- d. The USDA/ARS/NGRL is collaborating with the USDA/FAS/Caucasus Agricultural Development Initiative and the International Center for Agricultural Research in the Dry Areas to fund and develop seed storage facilities - to include building renovation, staff training in genebank management and documentation, and the purchase of equipment and supplies, at the Institute of Botany (The genebank of the National Academy of Sciences of Armenia) and the Institute of Agro-biotechnology, under the Ministry of Agriculture.

Authorized Signature: Institute of Botany, National Academy of Sciences of Armenia

  
Zhirair Vardanyan  
Director  
Institute of Botany  
National Academy of Sciences of Armenia

3 Oct 2006  
Date

Authorized Signatures: USDA/ARS

  
Edward J. Garvey  
Plant Exchange Officer  
National Germplasm Resources Lab.  
  
Harry D. Dansforth  
Technology Transfer Coordinator  
Beltsville Area  
USDA/ARS

8 Nov 2006  
Date  
11/08/06  
Date

# Appendix 1b - Material Transfer Agreement between Georgia and United States.

**Material Transfer Agreement**  
between the  
**U.S. Department of Agriculture**  
**Agricultural Research Service**  
and the  
**Institute of Botany**  
**Georgia Academy of Science**

This Material Transfer Agreement (MTA) is made and entered into, by and between the U.S. Department of Agriculture, Agricultural Research Service, (hereinafter referred to as "USDA/ARS"), and the Institute of Botany, Georgia Academy of Science.

Recognizing the importance to humanity of protecting, utilizing and conserving plant genetic resources for present and future generations, the Parties hereto have signed the present MTA to support collaborative research involving the collection, exchange and preservation of plant genetic resources. Collaborations include seed collections in Georgia by Georgian scientists and joint seed collections by US and Georgian scientists.

**Collaborators:**

Marine Mosulishvili, Ph.D.  
Institute of Botany  
Georgia Academy of Science  
Kopri Road 1  
Tbilisi, 0107  
Republic of Georgia

Edward J. Garvey, Ph.D.  
USDA/ARS  
National Germplasm Resources Laboratory  
10300 Baltimore Ave.  
Beltsville, MD 20705  
U.S.A.

This MTA is in accordance with the *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization*. Any disputes arising from this agreement will be settled according to the recommendations of the above Bonn Guidelines.

Samples of the plant genetic resources and associated documentation collected through this collaboration will be sent to the US collaborator.

Samples of the collected germplasm are available for the Georgia/National Plant Germplasm System or another institute designated by the Institute of Botany.

The US portion of the germplasm and documentation will be deposited in the U.S. National Plant Germplasm System (USNPGS), where the accessions and documentation will be conserved and made freely available to scientists worldwide for use in research, breeding and training.

USDA/ARS agrees to the following conditions for germplasm provided by the Georgian collaborator to ARS for inclusion in the NPGS collections:

- a. USDA/ARS will not claim ownership over the materials in the form received, or seek intellectual property rights over that germplasm in the form received, or over related information.
- b. USDA/ARS, upon the request of Institute of Botany, will make available the names and

addresses of persons to whom the NPGS distributes the germplasm.

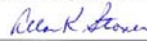
c. USDA/ARS, upon the request of the Institute of Botany, will notify any subsequent persons or institutions to whom the NPGS provides samples of the germplasm that they are not to claim ownership or seek intellectual property rights over the germplasm in the form received, or over related information.

The benefits to Georgia from this collaboration are:

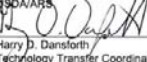
- a. Most plant genetic resources collected through this collaboration will be conserved in the US NPGS in the long-term (20°C and possibly cryopreservation) and medium-term germplasm storage facilities of the US NPGS, an internationally recognized genebank. Samples of this germplasm will be provided to the National Genebank of the Republic of Georgia upon request by an appropriate official of the government of Georgia.
- b. All funds needed to support this collaboration are provided by the USDA/ARS National Germplasm Resources Laboratory, according to the approved budget.
- c. Professional associations between the Georgian and US scientists will be strengthened and may result in additional collaborations, opportunities for advanced training, and shared scientific publications.
- d. Scientific knowledge on the location, size and nature of indigenous populations collected in Georgia will be documented and made available to other scientists.

With authorization from the Georgia Ministry of Environment, the Institute of Botany, Georgian Academy of Science gives national access permission to plant genetic resources in Georgia in support of this collaboration.

Authorized Signatures: USDA/ARS


  
Allan K. Stoner  
Research Leader  
National Germplasm Resources Lab.  
USDA/ARS

May 7, 2004  
Date

  
Harry D. Dansforth  
Technology Transfer Coordinator  
Beltsville Area  
USDA/ARS

May 7, 2004  
Date

Authorized Signature: Institute of Botany, Georgia Academy of Science

  
George Nakhutsrishili  
Director  
Institute of Botany  
Georgia Academy of Science

June 30, 04  
Date

## Appendix 2

## Caucasus 2006 Sample Summary

Collected by: Joseph Postman (USDA/ARS NCGR, Corvallis, Oregon)  
 Ed Stover (USDA/ARS NCGR, Davis, California)  
 Marina Mosulishvili (Institute of Botany, Tbilisi, Georgia)  
 Anush Nersesyan (Institute of Botany, Armenian National Academy of Sciences, Yerevan, Armenia)

## Georgia Samples

Genus species	Clonal Samples	Seed Samples
<i>Alcea rugosa</i>		1
<i>Castanea sativa</i>		2
<i>Cornus mas</i>	1	5
<i>Corylus avellana</i>	1	1
<i>Cotinus cogigria</i>		1
<i>Crataegus pentagina</i>		1
<i>Cydonia oblonga</i>	6	
<i>Diospyros kaki</i>	2	
<i>Diospyros lotus</i>		2
<i>Fagus orientalis</i>		2
<i>Ficus carica</i>	16	
<i>Humulus lupulus</i>		3
<i>Juglans regia</i>	9	2
<i>Juniperus rufescens</i>		1
<i>Malus orientalis</i>		1
<i>Malus x domestica</i>	1	
<i>Mespilus germanica</i>	5	1
<i>Physalis alkeneni</i>		1
<i>Pistacia mutica</i>		5
<i>Pistacia vera</i>	2	1
<i>Portulaca oleracea</i>		1
<i>Prunus armeniaca</i>	2	
<i>Prunus avium</i>	1	
<i>Prunus cerasifera</i>	8	
<i>Prunus cerasus</i>	2	
<i>Prunus cerasus</i>	1	
<i>Prunus divaricata</i>		1
<i>Prunus domestica</i>	1	
<i>Prunus dulcis</i>	3	
<i>Prunus persica</i>	3	4
<i>Prunus vulgaris</i>	1	
<i>Pterocarya ptercarpa</i>		4
<i>Punica granatum</i>	4	2
<i>Pyrus communis</i>	7	1
<i>Pyrus sachokiana</i>	1	1
<i>Pyrus salicifolia</i>		2
<i>Quercus iberica</i>		1
<i>Quercus longipes</i>		1
<i>Staphelia pinnata</i>		1
<i>Vitis sylvestris</i>		4
<i>Vitis vinifera</i>	20	
<b>Total</b>	<b>97</b>	<b>53</b>

## Armenia Samples

Genus species	Clonal Samples	Seed Samples
<i>Acer hyrcanum</i>		2
<i>Acer iberica</i>		2
<i>Cornus mas</i>		1
<i>Cotinus cogigria</i>		1
<i>Crataegus pontica</i>		1
<i>Cydonia oblonga</i>	6	1
<i>Diospyros kaki</i>	1	
<i>Eleagnus angustifolia</i>		1
<i>Eriobotrya japonica</i>		1
<i>Ficus carica</i>	3	3
<i>Humulus lupulus</i>		5
<i>Jasminum fruticosum</i>		1
<i>Juglans regia</i>	2	5
<i>Juniperus depressa</i>		1
<i>Malus orientalis</i>		4
<i>Mentha longifolia</i>		1
<i>Mespilus germanica</i>	2	3
<i>Morus alba</i>	1	
<i>Morus nigra</i>	2	2
<i>Pistacia mutica</i>		4
<i>Platanus orientalis</i>		1
<i>Prunus armeniaca</i>	8	
<i>Prunus avium</i>	2	2
<i>Prunus divaricata</i>		3
<i>Prunus dulcis</i>	6	
<i>Prunus fenzliana</i>		4
<i>Prunus incana</i>		2
<i>Prunus microcarpa</i>		2
<i>Prunus nairica</i>		2
<i>Prunus spinosa</i>		1
<i>Punica granatum</i>	11	1
<i>Pyrus caucasica</i>		1
<i>Pyrus communis</i>	6	
<i>Pyrus salicifolia</i>		8
<i>Rosa sp.</i>		1
<i>Sorbus graeca</i>		1
<i>Sorbus torminalis</i>		1
<i>Viburnum lantana</i>		1
<i>Vitis hybrid</i>	1	
<i>Vitis sylvestris</i>		6
<i>Vitis vinifera</i>	10	
<b>Total</b>	<b>61</b>	<b>76</b>

Georgia & Armenia 2006 Samples

Collected by: Joseph Postman (USDA/ARS NCGR, Corvallis, Oregon)  
 Ed Stover (USDA/ARS NCGR, Davis, California)  
 Marina Mosulshvili (Institute of Botany, Tbilisi, Georgia)  
 Anush Nersesyan (Institute of Botany, Armenian National Academy of Sciences, Yerevan, Armenia)

Sample #	Collection Date	Sample Type		Plant Name Information			Collection Site				Plant Description		Disposition	
		Seed Cutting	Herbarium Samples	Genus	Species	Cultivar or Local Name	Latitude	Longitude	Elev. (m)	Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
<b>Georgia Samples</b>														
GE-2006-001	9/19/06	C	0	Vitis	vinifera	Goruli Mtsvane	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR
GE-2006-002	9/19/06	C	0	Vitis	vinifera	Chinuri	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape, one of oldest cultivars	cultivated	Davis-QUAR
GE-2006-003	9/19/06	C	0	Vitis	vinifera	Tavkeveri	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape, female cv.	cultivated	Davis-QUAR
GE-2006-004	9/19/06	C	0	Vitis	vinifera	Ghrubela Kartlis	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape; 'ghrubela' means gray,'Kartli' is origin province	cultivated	Davis-QUAR
GE-2006-005	9/19/06	C	0	Vitis	vinifera	Mudjuretuli	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR
GE-2006-006	9/19/06	C	0	Vitis	vinifera	Alexandrouli	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR
GE-2006-007	9/19/06	C	0	Vitis	vinifera	Gorula	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR
GE-2006-008	9/19/06	C	0	Vitis	vinifera	Saperavi	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR



Sample #	Collection Date	Seed Cutting	Herbarium Samples	Herbarium			Elev.			Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
				Genus	Species	Cultivar or Local Name	Latitude	Longitude	(m)					
GE-2006-009	9/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Otskhanuri Sapere	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR
GE-2006-010	9/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Ojaleshi	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR
GE-2006-011	9/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Djani Bakhvis	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR
GE-2006-012	9/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Katchitchi	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR
GE-2006-013	9/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Rkatsiteli	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape	cultivated	Davis-QUAR
GE-2006-014	9/19/06	X	0	<i>Vitis</i>	<i>vinifera</i>	Budeshuri Tsiteli (not collected)	41.75193	44.77120	423	Tbilisi		table grape		
GE-2006-015	9/19/06	X	0	<i>Vitis</i>	<i>vinifera</i>	Kisi (not collected)	41.75193	44.77120	423	Tbilisi		wine grape		
GE-2006-016	9/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Saperavi Budeshuriseburi	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape. Plant received as 'Saperavi' that resembles cultivar 'Budeshuriseburi'	cultivated	Davis-QUAR
GE-2006-017	9/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Khikhvi (Kikhvi)	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape, one of oldest cultivars	cultivated	Davis-QUAR
GE-2006-018	9/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Rkatsiteli Vardsperi	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Tsertsvadze and david Magradze from a germplasm collection assembled by Tsertsvadze at the Institute of Horticulture, Viticulture & Oenology in Tbilisi, representing traditional Georgian grape varieties from different geographic areas.	wine grape. Pink fruit sport of Rkatsiteli, 'vardsperi' means pink	cultivated	Davis-QUAR
GE-2006-019	9/19/06	C	0	<i>Ficus</i>	<i>carica</i>	Georgia White Fig	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Shengelia (walnut specialist) from tree growing in his collection at the Georgia Institute of Horticulture, Viticulture & Oenology, Tbilisi.	traditional	cultivated	Davis
GE-2006-020	9/19/06	C	0	<i>Ficus</i>	<i>carica</i>	GIHVO White Fig Selection No. 1	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Shengelia (walnut specialist) from tree growing in his collection at the Georgia Institute of Horticulture, Viticulture & Oenology, Tbilisi.	Green fig with pink/red pulp, many fruiting nodes per shoot. GIHVO = Georgia Institute for Horticulture, Viticulture & Oenology	cultivated	Davis



Sample #	Collection Date	Seed Cutting	Herbarium Samples	Genus	Species	Cultivar or Local Name	Elev.			Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
							Latitude	Longitude	(m)					
GE-2006-021	9/19/06	C	0	<i>Ficus</i>	<i>carica</i>	GIHVO White Fig Selection No. 2	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Shengelia (walnut specialist) from tree growing in his collection at the Georgia Institute of Horticulture, Viticulture & Oenology, Tbilisi.	Green fig with pink/red pulp. GIHVO = Georgia Institute for Horticulture, Viticulture & Oenology	cultivated	Davis
GE-2006-022	9/19/06	C	0	<i>Ficus</i>	<i>carica</i>	GIHVO White Fig Selection No. 3	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Shengelia (walnut specialist) from tree growing in his collection at the Georgia Institute of Horticulture, Viticulture & Oenology, Tbilisi.	Not considered desirable by IHVO scientists, but juicy while still firm. GIHVO = Georgia Institute for Horticulture, Viticulture & Oenology	cultivated	Davis
GE-2006-023	9/19/06	C	0	<i>Ficus</i>	<i>carica</i>	Georgia Black Fig	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Shengelia (walnut specialist) from tree growing in his collection at the Georgia Institute of Horticulture, Viticulture & Oenology, Tbilisi.	resistant to frost	cultivated	Davis
GE-2006-024	9/19/06	C	0	<i>Ficus</i>	<i>carica</i>	Georgian Violet Fig	41.75193	44.77120	423	Tbilisi	Cuttings provided by Nugzar Shengelia (walnut specialist) from tree growing in his collection at the Georgia Institute of Horticulture, Viticulture & Oenology, Tbilisi.	large purplish fig, ribbed with green-red pulp, long peduncle. Said to be Smyrna type.	cultivated	Davis
GE-2006-025	9/19/06	C	0	<i>Ficus</i>	<i>carica</i>	GIHVO Italian Green Fig	41.75193	44.77120	423	Tbilisi		Fruit smooth green skin, red pulp, probably from Italy.	cultivated	Davis
GE-2006-026	9/19/06	C	0	<i>Prunus</i>	<i>dulcis</i>	Giki	41.75193	44.77120	423	Tbilisi			cultivated	Davis-QUAR
GE-2006-027	9/19/06	C	0	<i>Prunus</i>	<i>dulcis</i>	GIHVO Almond Selection No. 5	41.75193	44.77120	423	Tbilisi		GIHVO = Georgia Institute for Horticulture, Viticulture & Oenology	cultivated	Davis-QUAR
GE-2006-028	9/19/06	C	0	<i>Prunus</i>	<i>dulcis</i>	GIHVO Almond Selection No. 9	41.75193	44.77120	423	Tbilisi		GIHVO = Georgia Institute for Horticulture, Viticulture & Oenology	cultivated	Davis-QUAR
GE-2006-029	9/19/06	C	0	<i>Punica</i>	<i>granatum</i>	Guarjari	41.75193	44.77120	423	Tbilisi			cultivated	Davis
GE-2006-030	9/19/06	C	0	<i>Punica</i>	<i>granatum</i>	Piromani	41.75193	44.77120	423	Tbilisi		named for famous Georgian artist	cultivated	Davis
GE-2006-031	9/19/06	C	0	<i>Corylus</i>	<i>avellana</i>	Gulshishvela	41.75193	44.77120	423	Tbilisi		cultivar that bears only female flowers	cultivated	Corvallis
GE-2006-032	9/19/06	C	0	<i>Pyrus</i>	<i>communis</i>	GIHVO Pear Selection No. 21	41.75193	44.77120	423	Tbilisi		Cross of Josephina x Admiral Gervais. From breeding program of Kuri Dzeria	cultivated	Corvallis-QUAR
GE-2006-033	9/19/06	S	0	<i>Cornus</i>	<i>mas</i>	GIHVO Cornelian Cherry Selection 1	41.75193	44.77120	423	Tbilisi		Fruit small, ovate; 2.0 cm long, 1.2 cm diam., dark purple flesh, distinct rich, pomegranate-like flavor	cultivated of wild origin	Ames, Corvallis, National Arboretum
GE-2006-034	9/19/06	S	0	<i>Cornus</i>	<i>mas</i>	GIHVO Cornelian Cherry Selection 2	41.75193	44.77120	423	Tbilisi		Fruit larger than No. 1; 2.0 cm long, 1.5 cm diam., lighter color, more tart when ripe, ovate fruit shape	cultivated of wild origin	Ames
GE-2006-035	9/19/06	C	0	<i>Juglans</i>	<i>regia</i>	Vashlajvari Walnut Selection No. 1	41.75193	44.77120	423	Tbilisi		Lateral bearing, third generation o.p. selection derived from Uzbek germplasm.	cultivated	Davis
GE-2006-036	9/19/06	C	0	<i>Juglans</i>	<i>regia</i>	Vashlajvari Walnut Selection No. 2	41.75193	44.77120	423	Tbilisi		Lateral bearing, third generation o.p. selection derived from Uzbek germplasm.	cultivated	Davis
GE-2006-037	9/19/06	C	0	<i>Juglans</i>	<i>regia</i>	Vashlajvari Walnut Selection No. 3	41.75193	44.77120	423	Tbilisi		Lateral bearing, third generation o.p. selection derived from Uzbek germplasm.	cultivated	Davis
GE-2006-038	9/19/06	C	0	<i>Juglans</i>	<i>regia</i>	Gareji	41.75193	44.77120	423	Kakheti		Origin in Kakheti, 10g. nuts, 52% kernel, a recommended variety in Kakheti.	cultivated	Davis
GE-2006-039	9/19/06	C	0	<i>Juglans</i>	<i>regia</i>	Akura	41.90753	44.80618	690	Kakheti		From the village of Akura in Kakheti. Thin shell, good nut quality, 52% kernel, 72% oil; 120 kg. per tree at maturity.	cultivated	Davis
GE-2006-040	9/19/06	C	0	<i>Juglans</i>	<i>regia</i>	Aragvi	41.90753	44.80618	690	Kartli		From the village of Aragvi Spiri in Kartli Province. 12g. nut, thin shell, 54% kernel, 68% oil. Very productive.	cultivated	Davis
GE-2006-041	9/19/06	C	0	<i>Juglans</i>	<i>regia</i>	Atskuri	41.90753	44.80618	690	Kakheti		From the village of Atskuri in Kakheti. Round nuts, good size, 50% kernel, 69% oil. 80 kg. per tree at maturity.	cultivated	Davis
GE-2006-042	9/19/06	C	0	<i>Juglans</i>	<i>regia</i>	Kaspura	41.90753	44.80618	690	Kartli		From the village of Kaspi in Kartli Province. Productive, thin shell, 55% kernel, 70% oil.	cultivated	Davis
GE-2006-043	9/19/06	C	0	<i>Juglans</i>	<i>regia</i>	Galavnura	41.91003	44.81200	684	Kartli		Seedling walnut that originated in a fencerow near Galavani. Identified by Nugzar Shengelia of GIHVO. Large nuts, thin shell, 50% kernel, v. late flowering. Recommended for Kartli region.	cultivated	Davis
GE-2006-044	9/19/06	S	0	<i>Prunus</i>	<i>divaricata</i>		41.75193	44.77120	423	Tbilisi		Red leaf seedling found in GIHVO orchard. A tree of >4 meters. Fruit 2.0 cm long, 1.7 cm diam; purple-black skin, purple flesh, sweet-tart. Seeds collected.	cultivated of wild origin	Davis-QUAR
GE-2006-045	9/19/06	S	0	<i>Cornus</i>	<i>mas</i>	Cornelian Cherry - Tbilisi market sample	41.70000	44.70000		Tbilisi	Fruit purchased from market in Tbilisi.	Fruit 3.0 cm. long, 1.9 diam. pyriform shape, red skin, red flesh.	cultivated	Ames, Corvallis, National Arboretum
GE-2006-046	9/20/06	S	0	<i>Prunus</i>	<i>persica</i>	Peach - Gori market sample	42.01674	44.08753	692	Kartli	Fruit purchased from market in Gori	Large, white flesh, white peel with pink blush, aromatic bruises easily, freestone, excellent	cultivated	Davis-QUAR

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GE-2006-047	9/20/06	S	0	<i>Prunus</i>	<i>persica</i>	Peach - Gori market sample	42.01674	44.08753	692	Kartli	Fruit purchased from market in Gori	Medium, white flesh, white peel with green patch, aromatic, told sweet pit, freestone, many pits break open when cutting fruit, slight bitterness in flesh, browns rapidly	cultivated	Davis-QUAR
GE-2006-048	9/20/06	S	0	<i>Prunus</i>	<i>persica</i>	Peach - Gori market sample	42.01674	44.08753	692	Kartli	Fruit purchased from market in Gori	Small, white flesh, white peel with pink blush and green, aromatic, mix of cling and freestone, slight bitterness in flesh	cultivated	Davis-QUAR
GE-2006-049	9/20/06	S	0	<i>Prunus</i>	<i>persica</i>	Peach - Gori market sample	42.01674	44.08753	692	Kartli	Fruit purchased from market in Gori	Small, orange flesh, orange peel with pink blush and green, aromatic, freestone, excellent	cultivated	Davis-QUAR
GE-2006-050	9/20/06	C	0	<i>Punica</i>	<i>granatum</i>	Sweet Pomegranate	41.96975	44.00442	750	Kartli	Koshkebi		cultivated	Davis
GE-2006-051	9/20/06	C	0	<i>Punica</i>	<i>granatum</i>	Sweet-Sour Pomegranate	41.96975	44.00442	750	Kartli	Koshkebi	Small, flattened fruit, 6.5 cm. X 5 cm. Yellow skin with pink blush and flecks. Green stripes, light arils. Hard seeds	cultivated	Davis
GE-2006-052	9/20/06	C	0	<i>Ficus</i>	<i>carica</i>	Koshkebi Black Fig	41.96975	44.00442	750	Kartli	Koshkebi	Seedling with large, flat, black figs (solid black like mission), many figs per shoot, mild red pulp, watermelon like flavor. Fruits 5 cm diam. 3 cm tall. High acid, low sugar	cultivated	Davis
GE-2006-053	9/20/06	C	0	<i>Prunus</i>	<i>avium</i>	Kharisgula (Ox Heart)	41.96975	44.00442	750	Kartli	Koshkebi	Fruit gone. Described as heart-shaped, black sweet cherry, stem stays with fruit, grafted tree.	cultivated	Davis-QUAR
GE-2006-054	9/20/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	Quince from Ioseb Tomashvili	41.96975	44.00442	750	Kartli	Koshkebi	Described as edible out of hand, slightly elongated. No fruit this year.	cultivated	Corvallis-QUAR
GE-2006-055	9/20/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	Alipriala	41.96975	44.00442	750	Kartli	Koshkebi	Large local apricot with very red fruit, we are told. Large, grafted tree.	cultivated	Davis-QUAR
GE-2006-056	9/20/06	C	0	<i>Ficus</i>	<i>carica</i>	Koshkebi White Fig	41.96975	44.00442	750	Kartli	Koshkebi	White fig with red interior, used for preserves, main crop late, 6-8 fruit/limb.	cultivated	Davis
GE-2006-057	9/20/06	C	0	<i>Prunus</i>	<i>cerasifera vach</i>	Alucha	41.96975	44.00442	750	Kartli	Koshkebi	We are told fruit is large cerasifera subsp. Sweet when still green, but yellow when fully mature. First fruit ripe in the area (early July), ripe with white mulberry.	cultivated	Davis-QUAR
GE-2006-058	9/20/06	C	0	<i>Diospyros</i>	kaki	Koshkebi Persimmon	41.96975	44.00442	750	Kartli	Koshkebi	We are told it is flat, astringent type. Lots of unripe fruit on tree. Tree purchased by owner from market in Gori.	cultivated	Davis
GE-2006-059	9/20/06	C	0	<i>Ficus</i>	<i>carica</i>	Guda Legvi (wine-skin fig)	41.96975	44.00442	750	Kartli	Koshkebi	We are told that the fig is huge when ripe, green when mature, with red or golden pulp. 5-8 figs per shoot were apparent to us. Leaves had very slender lobes with 5-7 lobes/leaf.	cultivated	Davis
GE-2006-060	9/20/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Budeshuri Tsiteli	41.97600	44.00800	690	Kartli	Between Skra & Koshrebi	Black table grape	cultivated	Davis-QUAR
GE-2006-061	9/20/06	-	0	<i>Malus</i>	<i>x domestica</i>	Skra selection 'Nino' - Discarded	41.99150	44.02160	620	Kartli	Skra Experiment Station	Selection observed by Mzia Baiadze in fence-row by Experiment Station. Appeared to be scab free in third leaf. Tree had 24 large fruits in third leaf. Good storage quality.		none
GE-2006-062	9/20/06	C	0	<i>Prunus</i>	<i>vulgaris</i>	Chanchuri - Skra Selection	41.99150	44.02160	620	Kartli	Skra Experiment Station	Used for jams, liquors, fresh fruit and distilled spirits. Propagated by layers or grafting. Different forms throughout Georgia. 4 cm long prune-plum that is bottle shaped, with nice aroma, rusty red skin color, yellow flesh	cultivated	Davis-QUAR
GE-2006-063	9/20/06	C	0	<i>Prunus</i>	<i>cerasifera</i>	Skra selection 'Mzia'	41.99150	44.02160	620	Kartli	Skra Experiment Station	Large, somewhat elongate fruit (4 cm) with yellow skin, orange flesh, very juicy and sweet. Selected from among many seedlings, used for fresh fruit and juice. Harvested 100 kg fruit on tree in 2005. We sampled juice made from the fruit. Unsweetened juice was sweet, orange-yellow, thick, pleasant. Georgian name for <i>P. cerasifera</i> is 'Tkemali'	cultivated	Davis-QUAR
GE-2006-064	9/20/06	C	0	<i>Prunus</i>	<i>cerasifera</i>	Skra selection 'Dato'	41.99150	44.02160	620	Kartli	Skra Experiment Station	Georgian name for <i>P. cerasifera</i> is 'Tkemali'. Fruit 4cm long, rounded, green when ripe, but very sweet. Like Alucha, but ripe in September instead of July, and different leaf shape.	cultivated	Davis-QUAR
GE-2006-065	9/20/06	C	0	<i>Mespilus</i>	<i>germanica</i>	Skra Medlar Selection No. 1	41.99150	44.02160	620	Kartli	Skra Experiment Station	Medium size fruit (larger than wild type), from local area Koshrebi.	cultivated	Corvallis
GE-2006-066	9/20/06	C	0	<i>Prunus</i>	<i>cerasifera</i>	Skra Late	41.99150	44.02160	620	Kartli	Skra Experiment Station	Fruit fairly sweet, yellow peel and flesh, tastes like plum we are told. Fruit holds on tree until December. Single fruit was 2.5 cm long, 1.8 cm diam.	cultivated	Davis-QUAR

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				Genus	Species	Cultivar or Local Name	Latitude	Longitude	(m)					Province
GE-2006-067	9/20/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	Skra Quince Selection No. 1	41.99150	44.02160	620	Kartli	Skra Experiment Station	Large, pyriform fruit, about 10 cm long, 6 cm. wide, stores well, soft and edible when mature.	cultivated	Corvallis-QUAR
GE-2006-068	9/20/06	SC	0	<i>Cornus</i>	<i>mas</i>	Large Bottle-shape Cornelian Cherry	41.96975	44.00442	750	Kartli	Koshkebi	Propagated by grafting or layering. Fruit similar to that seen in market in Tbilisi (GE-2006-045).	cultivated	Ames, Corvallis, National Arboretum (cuttings to Corvallis)
GE-2006-069	9/20/06	C	0	<i>Mespilus</i>	<i>germanica</i>	Skra Medlar Selection No. 2	41.99150	44.02160	620	Kartli	Skra Experiment Station	Large fruited type, round, fruit on tree 4 cm. wide, 3 cm. tall, said to be smaller than normal this year due to late frost.	cultivated	Corvallis
GE-2006-070	9/20/06	C	0	<i>Prunus</i>	<i>persica</i>	Vazhuri	41.99150	44.02160	620	Kartli	Skra Experiment Station	Red striped peach with white flesh. Firm and ships well. An old variety from intentional cross in 1930s, at least 1 parent is local Georgian cv.	cultivated	Davis-QUAR
GE-2006-071	9/20/06	C	0	<i>Prunus</i>	<i>persica</i>	Krimchak	41.99150	44.02160	620	Kartli	Skra Experiment Station	From Ukraine. Bred by N. Riabov. Hard, good for transport, low aroma. One of most popular in Georgia.	cultivated	Davis-QUAR
GE-2006-072	9/20/06	C	0	<i>Prunus</i>	<i>persica</i>	Khidistavi	41.99150	44.02160	620	Kartli	Skra Experiment Station	Pink peel, white flesh, very high aroma, selected in early 20th century in the village of Khidistavi. Told that it doesn't hold up well in drought.	cultivated	Davis-QUAR
GE-2006-073	9/21/06	S	2	<i>Vitis</i>	<i>sylvestris</i>	Wild Grape	41.63021	45.45211		Kakheti	Korugi Preserve, Sagarejo District. Riparian area adjacent to Iora River with sandy-clay loam, deciduous forest with <i>Populus tremula</i> , <i>Craetegus</i> and <i>Quercus longipes</i> dominating, recent flowing water.	Typical type. Sampled from 2 fruiting vines of 10 observed, small fruit	wild	Davis
GE-2006-074	9/21/06	S	2	<i>Humulus</i>	<i>lupulus</i>	Wild Hop	41.62900	45.45440		Kakheti	Korugi Preserve, Sagarejo District. Riparian area adjacent to Iora River with sandy-clay loam, deciduous forest with <i>Populus tremula</i> , <i>Craetegus</i> and <i>Quercus longipes</i> dominating, recent flowing water.	Typical type. Sampled from the sole observed vine in the area with copious cones	wild	Corvallis
GE-2006-075	9/21/06	S	1	<i>Physalis</i>	<i>alkenengi</i>	Physalis	41.62900	45.45440		Kakheti	Korugi Preserve, Sagarejo District. Riparian area adjacent to Iora River with sandy-clay loam, deciduous forest with <i>Populus tremula</i> , <i>Craetegus</i> and <i>Quercus longipes</i> dominating, recent flowing water.	Composite sample of 12 plants with orange/red husk and red fruit	wild	Geneva
GE-2006-076	9/22/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Kisi	41.92300	45.50300	590	Kakheti	Telavi field station of Institute of Horticulture, Viticulture & Oenology.		cultivated	Davis-QUAR
GE-2006-077	9/22/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Adreuli Tkbelkana	41.92300	45.50300	590	Kakheti	Telavi field station of Institute of Horticulture, Viticulture & Oenology.		cultivated	Davis-QUAR
GE-2006-078	9/22/06	C	0	<i>Ficus</i>	<i>carica</i>	Kalauri Big Green Fig	41.92300	45.50300	590	Kakheti	Plant growing in garden along east of Telavi in village of Kalauri.		cultivated	Davis
GE-2006-079	9/22/06	C	0	<i>Pyrus</i>	<i>communis</i>	Shilda Garden Pear	41.99990	45.71180	492	Kakheti	Tree growing in garden across road from Geno's garden in village of Shilda.	An autumn pear, ripe in late Sept. early October (some fruit on ground but most firm on tree). Pyriform, green to yellow when ripe, juicy, coarse flesh, firm, crunchy, acid. Large grafted tree ~20m tall, 50+ years old.	cultivated	Corvallis-QUAR
GE-2006-080	9/22/06	C	0	<i>Prunus</i>	<i>cerasifera vachua</i>	Shilda Red Cheek Alucha	41.99990	45.71180	492	Kakheti	Tree growing in home garden in village of Shilda.	Fruit said to ripen in June, skin green with red blush, ~5cm; young foliage more green & shiny than typical <i>P. cerasifera</i> . Grafted tree ~12m tall. Alucha is ripe in June, while normal <i>P. cerasifera</i> in same garden ripens in late July-August.	cultivated	Davis-QUAR
GE-2006-081	9/22/06	C	0	<i>Prunus</i>	<i>cerasifera vachua</i>	Shilda Yellow Alucha	41.99990	45.71180	492	Kakheti	Tree growing in home garden in village of Shilda.	Fruit said to be smaller than GE-080 with no red blush. Alucha is ripe in June, while normal <i>P. cerasifera</i> in same garden ripens in late July-August.	cultivated	Davis-QUAR
GE-2006-082	9/22/06	C	0	<i>Mespilus</i>	<i>germanica</i>	Shilda Garden Medlar	41.99990	45.71180	492	Kakheti	Tree growing in home garden in village of Shilda, originally purchased in Market in Logodeki.	Medium to large medlar, slightly elongated. Grafted tree.	cultivated	Corvallis
GE-2006-083	9/22/06	C	0	<i>Ficus</i>	<i>carica</i>	Shilda Flat Yellow Fig	41.99990	45.71180	492	Kakheti	Tree growing in home garden in village of Shilda.	Flat, yellow, calimyrna-like fig, turns light bronze streaked when fully tree-ripe. Owner notes that it stores well fresh. Eye fairly wide. Pink to amber flesh, mild flavor.	cultivated	Davis
GE-2006-084	9/22/06	C	0	<i>Ficus</i>	<i>carica</i>	Shilda Flat Purple-Bronze Fig	41.99990	45.71180	492	Kakheti	Tree growing in home garden in village of Shilda.	Fruit medium to large, purple-bronze when ripe, flat, splits in rain, red/pink flesh.	cultivated	Davis
GE-2006-085	9/22/06	S	2	<i>Staphelia</i>	<i>pinnata</i>	Shilda Garden Bladderwort	41.99990	45.71180	492	Kakheti	Row of plants growing along edge of garden in village of Shilda.	Seeds collected from 4 plants, probably seedlings, to 4m in height; some are showing red stems & red fall color. Inflorescence is pickled and served as a side dish, with flavor like artichoke heart.	cultivated of wild origin	Ames

Sample #	Collection Date	Seed Cutting	Herbarium Samples	Herbarium			Elev.			Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients	
				Genus	Species	Cultivar or Local Name	Latitude	Longitude	(m)					Province
GE-2006-086	9/22/06	C	0	<i>Pyrus</i>	<i>communis</i>	Gulabi from Shilda	41.99990	45.71180	492	Kakheti	Tree growing in home garden in village of Shilda.	Old Georgia variety. Very early ripening. Fruit is long gone, but said to have had a heavy crop in July this year. Fruit small-medium, yellow skin. Marina says it ripens to very soft, tasty, juicy. Grafted tree ~7m tall.	cultivated	Corvallis-QUAR
GE-2006-087	9/22/06	C	0	<i>Pyrus</i>	<i>communis</i>	Khechchuri	41.99990	45.71180	492	Kakheti	Tree growing in home garden in village of Shilda.	Fruit small to medium size, ripens late, stored for winter use; said to keep until spring. Grafted tree ~7m tall.	cultivated	Corvallis-QUAR
GE-2006-088	9/22/06	X	0	-	-	no sample	-	-	-	-	-	-	-	none
GE-2006-089	9/23/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Tita	41.99990	45.71180	492	Kakheti	Grape growing in Geno's yard in Shilda.	Large, black-seeded table grape with nipple-like projection on apex.	cultivated	Davis-QUAR
GE-2006-090	9/23/06	C	0	<i>Diospyros</i>	<i>kaki</i>	Khurma	41.99990	45.71180	492	Kakheti	Persimmon tree growing in Geno's yard in Shilda.	Large, seedless, astringent, red/orange fruit which are deeply ribbed.	cultivated	Davis
GE-2006-091	9/23/06	C	0	<i>Ficus</i>	<i>carica</i>	Large Green Fig	41.99990	45.71180	492	Kakheti	Tree growing in Geno's yard in Shilda.		cultivated	Davis
GE-2006-092	9/23/06	S	2	<i>Pterocarya</i>	<i>ptercarpa</i>	Wing Nut	42.01980	45.77326	668	Kakheti	Chelti River Gorge. Mixed deciduous forest, rocky alluvial soil, associated vegetation: <i>Fagus orientalis</i> , <i>Crataegus</i> , <i>Carpinus</i> .	Seeds collected from 6 nearby trees. Trees range in age and size to 20m tall, some must be >200 years (guide says 500).	wild	Davis
GE-2006-093	9/23/06	S	1	<i>Fagus</i>	<i>orientalis</i>	Oriental Beech	42.01980	45.77326	668	Kakheti	Chelti River Gorge	Seeds collected from 2 trees approx. 100 meters apart.	wild	National Arboretum, Morris Arboretum
GE-2006-094	9/23/06	SC	2	<i>Mespilus</i>	<i>germanica</i>	Wild Medlar	42.02713	45.79283	781	Kakheti	Chelti River Gorge, about .5 kilometer up gorge from GE-092 and 093. waypoint 143	Fruits collected from several nearby trees, scions collected from single tree with slightly larger fruit than others.	wild	Corvallis
GE-2006-095	9/23/06	S	2	<i>Crataegus</i>	<i>pentagina</i>	Black Fruited Hawthorn	42.02713	45.79283	781	Kakheti	Chelti River Gorge, about .5 kilometer up gorge from GE-092 and 093. waypoint 143	Multi-stem tree to 5 meters, dark purple, shiny, 5 seeded fruit, few thorns. Attractive tree and fruit with ornamental potential.	wild	National Arboretum
GE-2006-096	9/23/06	S	0	<i>Fagus</i>	<i>orientalis</i>	Oriental Beech	42.04783	45.81329	975	Kakheti	Chelti River Gorge, further up gorge from GE-094 and 095.	Huge old tree, perhaps 300+ years old.	wild	National Arboretum, Morris Arboretum
GE-2006-097	9/23/06	S	0	<i>Juglans</i>	<i>regia</i>	Walnut	42.01987	45.76476	754	Kakheti	Possibly wild, or may have been planted by Forestry Department.	Nuts from ~9 trees about 20 years old growing in a group along unimproved dirt road. Nuts vary in size from small to commercial.	wild	Davis
GE-2006-098	9/23/06	H	1	<i>Humulus</i>	<i>lupulus</i>	Hop with v. small cones - herbarium only	42.01987	45.76476	754	Kakheti	Chelti River Gorge near GE-097.	Herbarium sample only from hop vine with unusually small cones. Uncertain whether young & immature, or genetic phenotype. Few to no seeds in small cones. A few larger cones have seeds. Other hop plants nearby have large cones.		
GE-2006-099	9/23/06	S	0	<i>Humulus</i>	<i>lupulus</i>	Wild Hop	42.01987	45.76476	754	Kakheti	Chelti River Gorge near GE-097.	Wild hops growing on small trees and brush along road. Collected from several different plants, some cones very large.	wild	Corvallis
GE-2006-100	9/23/06	S	0	<i>Castanea</i>	<i>sativa</i>	Chestnut	42.01987	45.76476	754	Kakheti	Chelti River Gorge near GE-097.	Walnuts not quite ripe, seeds collected from 2 trees (mostly from 1).	wild	Craddock, Anagnostakis
GE-2006-101	9/23/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	Chacha Quince	42.00847	45.72744	570	Kakheti	Garden of the chacha distillery in village of Shilda.	Chacha' is not a cultivar name, but an alcoholic drink made from local grapes. This large fruited, mostly pyriform quince was growing in the yard. Fruit green-yellow, smooth skin. Tree free of diseases. Photos of local children holding fruit.	cultivated	Corvallis-QUAR
GE-2006-102	9/23/06	S	1	<i>Castanea</i>	<i>sativa</i>	Chestnut	42.00847	45.72744	570	Kakheti	Tree in yard along main road of Shilda village.	Enormous, old, tall, spreading tree takes up entire yard of home and canopy hangs across wall and over road. Very large crop on tree. Nuts almost mature.	cultivated	Craddock, Anagnostakis
GE-2006-103	9/23/06	S	0	<i>Juglans</i>	<i>regia</i>	Wild Walnut	41.97938	45.76465	416	Kakheti	Near site of old Nekresi village.	Large tree, likely wild growing along riparian valley. Two nuts found on ground.	wild	Davis
GE-2006-104	9/23/06	S	0	<i>Pterocarya</i>	<i>ptercarpa</i>	Wing Nut	41.97938	45.76465	416	Kakheti	Near site of old Nekresi village.	Large, old tree in stand with many other wingnuts, but none with accessible seeds. Abundant seedlings in understory. Scions collected.	wild	Davis
GE-2006-105	9/23/06	S	2	<i>Diospyros</i>	<i>lotus</i>	Wild Persimmon	41.98642	45.76513	487	Kakheti	Near site of old Nekresi village.	Fruit from single tree growing at forest edge.	wild	Davis
GE-2006-106	9/23/06	S	0	<i>Corylus</i>	<i>avellana</i>	Hazelnut	41.98642	45.76513	487	Kakheti	Near site of old Nekresi village.	Nuts from single tree growing at forest edge near stream. Nuts small and roundish.	wild	Corvallis
GE-2006-107	9/23/06	C	0	<i>Ficus</i>	<i>carica</i>	Shilda Small Bronze Fig	41.99974	45.71062	490	Kakheti	Tree growing in Geno's yard in Shilda.	Fruit medium sized, bronze with green/red interior. Richest flavor of Georgia figs sampled yet. Sems very early, only one fruit left and very ripe.	cultivated	Davis
GE-2006-108	9/24/06	S	0	<i>Pterocarya</i>	<i>ptercarpa</i>	Wing Nut	41.83282	46.21168	388	Kakheti	Between villages of Ninigori & Khizabaura	Youngish trees growing along stream near cultivated area. Alluvial soil, seeds from 3 trees among many.	wild	Davis

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GE-2006-109	9/24/06	S	0	<i>Diospyros</i>	<i>lotus</i>	Wild Persimmon	41.83282	46.21168	388	Kakheti	Between villages of Ninigori & Khizabaura	Two trees growing next to cultivated field. Seeds from three trees, two at this waypoint and another about 1 km up gorge.	wild	Davis
GE-2006-110	9/24/06	S	0	<i>Pterocarya</i>	<i>ptercarpa</i>	Wing Nut	41.87222	46.23906	579	Kakheti	Between villages of Ninigori & Khizabaura	Similar habitat to GE-108, but further down gorge near walled compound and older trees. Seeds from at least 2 trees.	wild	Davis
GE-2006-111	9/25/06	S	1	<i>Pyrus</i>	<i>salicifolia</i>	Willow Leaf Pear	41.21873	46.42246	592	Kakheti	Edge of Vashlovani Preserve.	Collected from top of cliff edge overlooking Vashlovani Preserve. Fruit from two trees of about 12. Very dry habitat.	wild	Corvallis
GE-2006-112	9/25/06	S	1	<i>Pistacia</i>	<i>mutica</i>	Wild Pistacio	41.21873	46.42246	592	Kakheti	Edge of Vashlovani Preserve. Associated vegetation: <i>Pyrus salicifolia</i> , <i>Cotinus cogygria</i> , <i>Juniperus polycarpus</i> .	Seed from 4 plants scattered over 0.75 km. These were the only trees of about 20 with fruit. Dry cliff habitat, overlooking Vashlovani Preserve. Rounded shrubs, 2-4 m high, many with leaves abscising. Fruit fully mature. Walked about 1 km into preserve where we could not collect. <i>P. mutica</i> was dominant species, similar to those we collected outside preserve. We have good sample of diversity. Sample A and Sample B each contain seed from two plants (total of 4 trees sampled).	wild	Davis
GE-2006-113	9/25/06	S	1	<i>Punica</i>	<i>granatum</i>	Wild Pomegranate	41.21569	46.43337	578	Kakheti	Entrance yard to Vashlovani Preserve.	Fruit from about 10 plants. Seem typical, sour, small fruited pomegranates. Reddish with yellow ground color, arils white to dark pink, very acid to sweet-sour. No pomegranates visible in neighboring preserve, but we were assured by botanist and guide that these were indeed wild plants.	wild	Davis
GE-2006-114	9/25/06	C	0	<i>Pyrus</i>	<i>sachokiana</i>	P. sachokiana scions	41.28349	46.46847	563	Kakheti	Cuttings donated by Merab Khachidze from the former Institute of Botany Experiment Station near village of Kasris Tskali.	Scions from single tree on station grounds.	cultivated of wild origin	Corvallis-QUAR
GE-2006-115	9/25/06	S	0	<i>Pyrus</i>	<i>sachokiana</i>	P. sachokiana o.p. seed	41.28349	46.46847	563	Kakheti	Seeds donated by Merab Khachidze from the former Institute of Botany Experiment Station near village of Kasris Tskali.	o.p. seed from GE-114, seeds collected by Merab Khachidze on 8/8/2005. Both <i>P. salicifolia</i> and <i>P. communis</i> are possible pollen parents. This species was described by Mikhail Sachokia from population growing in mountains to south, appears to be hybrid between <i>P. salicifolia</i> and <i>P. caucasica</i> .	cultivated of wild origin	Corvallis
GE-2006-116	9/25/06	C	0	<i>Pistacia</i>	<i>vera</i>	Pistacio Female Clone	41.28349	46.46847	563	Kakheti	Cuttings donated by Merab Khachidze from the former Institute of Botany Experiment Station near village of Kasris Tskali.	Were told that the tree had been transplanted from an experiment station, and was grown from seed from central Asia, possibly from Turkmenistan. An unremarkable fruit, medium size, white shell, pink exocarp, round in cross section, more or less a rounded cylinder.	cultivated	Davis
GE-2006-117	9/25/06	C	0	<i>Pistacia</i>	<i>vera</i>	Pistacio Male Clone	41.28349	46.46847	563	Kakheti	Cuttings donated by Merab Khachidze from the former Institute of Botany Experiment Station near village of Kasris Tskali.	Same origin as female clone GE-116. Only remarkable in having 3 leaflets on every leaf.	cultivated	Davis
GE-2006-118	9/25/06	S	0	<i>Pistacia</i>	<i>vera</i>	Pistacio o.p. seed from GE-116	41.28349	46.46847	563	Kakheti	Seeds donated by Merab Khachidze from the former Institute of Botany Experiment Station near village of Kasris Tskali.	o.p. seed from GE-116, collected by Merab Khachidze in 2005. Presumably pollinated by two male trees nearby, one of which is GE-117.	cultivated	Davis
GE-2006-119	9/26/06	S	0	<i>Pistacia</i>	<i>mutica</i>	Wild Pistacio	41.25931	45.98131	405	Kakheti	Chachuna Valley. Steppe. Dry valley with seasonal stream.	Dominant species were <i>P. mutica</i> , <i>Cotinus gogigria</i> , <i>Juniperus rufescens</i> , <i>J. foetidissima</i> , <i>J. polycarpus</i> , and <i>Paliurus spina-chrisi</i> .	wild	Davis
GE-2006-120	9/26/06	S	1	<i>Cotinus</i>	<i>cogigria</i>	Smoke Plant	41.25931	45.98131	405	Kakheti	Chachuna Valley. Steppe. Dry valley with seasonal stream.	Dominant species were <i>P. mutica</i> , <i>Cotinus gogigria</i> , <i>Juniperus rufescens</i> , <i>J. foetidissima</i> , <i>J. polycarpus</i> , and <i>Paliurus spina-chrisi</i> .	wild	National Arboretum
GE-2006-121	9/26/06	S	1	<i>Juniperus</i>	<i>rufescens</i>	Juniper	41.25931	45.98131	405	Kakheti	Chachuna Valley. Steppe. Dry valley with seasonal stream.	Dominant species were <i>P. mutica</i> , <i>Cotinus gogigria</i> , <i>Juniperus rufescens</i> , <i>J. foetidissima</i> , <i>J. polycarpus</i> , and <i>Paliurus spina-chrisi</i> .	wild	National Arboretum
GE-2006-122	9/26/06	S	0	<i>Quercus</i>	<i>longipes</i>	Oak	41.23073	45.95134	286	Kakheti	Chachuna Valley. Riparian Forest.	Tree growing between riparian zone and steppe. Seed from 2 trees about 15 m tall.	wild	National Arboretum, Morris Arboretum
GE-2006-123	9/26/06	S	0	<i>Pistacia</i>	<i>mutica</i>	Wild Pistacio	41.23073	45.95134	286	Kakheti	Chachuna Valley. Riparian Forest.	Tree growing between riparian zone and steppe.	wild	Davis



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GE-2006-124	9/26/06	S	0	<i>Punica</i>	<i>granatum</i>	<b>Pomegranate</b>	41.23073	45.95134	286	Kakheti	Chachuna Valley. Riparian Forest.	Seed from two locations along Iori River, trees growing in very wet soil. No other pomegranates seen nearby.	wild	Davis
GE-2006-125	9/26/06	S	1	<i>Portulaca</i>	<i>oleracea</i>	<b>Portulaca</b>	41.23073	45.95134	286	Kakheti	Chachuna Valley. Riparian Forest.	Very succulent, large glossy leaves. Attractive mound. Small, white flowers. Possible weedy potential.	wild	Columbus
GE-2006-126	9/26/06	-	-	<i>Limonium</i>	<i>sp.</i>	<b>discarded - no seed</b>	41.23073	45.95134	286	Kakheti	Chachuna Valley. Riparian Forest.			none
GE-2006-127	9/26/06	S	9	<i>Pistacia</i>	<i>mutica</i>	<b>Wild Pistacio</b>	41.23073	45.95134	286	Kakheti	Chachuna Valley. Riparian Forest.		wild	Davis
GE-2006-128	9/26/06	S	0	<i>Pyrus</i>	<i>communis caucasica</i>	<b>Wild European Pear</b>	41.42777	46.10225	756	Kakheti	Near Mount Elias. Edge of cultivated field.		wild	Corvallis
GE-2006-129	9/26/06	S	0	<i>Pistacia</i>	<i>mutica</i>	<b>Wild Pistacio</b>	41.28335	45.90115	338	Kakheti		Attractive, very large, single trunk tree by reservoir.	wild	Davis
GE-2006-130	9/26/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	<b>Dedoplis Tskaro Large Non-astringent Quince</b>	41.46530	46.09500	801	Kakheti	Yard of guesthouse in Dedoplis Tskaro. Nellie's Garden.		cultivated	Corvallis-QUAR
GE-2006-131	9/27/06	C	0	<i>Prunus</i>	<i>cerasus</i>	<b>Shpanka</b>	41.46530	46.09500	801	Kakheti	Yard of private home in Dedoplis Tskaro. Friend of Nellie, guesthouse owner.	Garden planted by amateur fruit collector. Said to be from Ukraine and that fruit are large, black and dark fleshed. Used for juice, preserves, compote, can eat out of hand.	cultivated	Davis-QUAR
GE-2006-132	9/27/06	S	0	<i>Cornus</i>	<i>mas</i>	<b>Large Dark Purple Cornelian Cherry</b>	41.46530	46.09500	801	Kakheti	Yard of private home in Dedoplis Tskaro. Friend of Nellie, guesthouse owner.	Fruit 2 cm long, 1.3 cm wide, ovoid, astringent, plant was purchased by avid fruit grower.	cultivated	Ames, Corvallis, National Arboretum
GE-2006-133	9/27/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	<b>Dedoplis Tskaro Sweet Non-astringent Quince</b>	41.46530	46.09500	801	Kakheti	Yard of private home in Dedoplis Tskaro. Friend of Nellie, guesthouse owner.	Fruit round, slightly pyriform, can be stored until January.	cultivated	Corvallis-QUAR
GE-2006-134	9/27/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	<b>Dedoplis Tskaro Sour Non-astringent Quince</b>	41.46530	46.09500	801	Kakheti	Yard of private home in Dedoplis Tskaro. Friend of Nellie, guesthouse owner.	Tall tree, 4-5 m., fruit slightly larger, wider, and more pyriform than GE-133	cultivated	Corvallis-QUAR
GE-2006-135	9/27/06	C	0	<i>Pyrus</i>	<i>communis</i>	<b>Gulabi from Dedoplis Tskaro</b>	41.46530	46.09500	801	Kakheti	Yard of private home in Dedoplis Tskaro. Friend of Nellie, guesthouse owner.	Ripe in August, yellow fruit.	cultivated	Corvallis-QUAR
GE-2006-136	9/27/06	C	0	<i>Prunus</i>	<i>domestica</i>	<b>Dedoplis Tskaro Plum</b>	41.46530	46.09500	801	Kakheti	Yard of private home in Dedoplis Tskaro. Friend of Nellie, guesthouse owner.	Large elongated prune-plum, black skin, yellow flesh, very sweet, said to be the best.	wild	Davis-QUAR
GE-2006-137	9/27/06	S	0	<i>Malus</i>	<i>orientalis</i>	<b>Wild Apple</b>	41.51691	45.93477	745	Kakheti	Along Road traveling west from Dedoplis Tskaro toward Tbilisi.	Fruit from only 1 tree, 6 other trees nearby.	wild	Geneva
GE-2006-138	9/27/06	C	0	<i>Prunus</i>	<i>cerasifera</i>	<b>Shota Tkemali</b>	41.66898	45.73583	755	Kakheti	Garden of Marina's father, Shota Mosulishvili, in village of Arashenda. Tree was purchased in Tbilisi in mid-1970s.	We are told that it has large fruit, about 2.5 cm long, red skin and flesh, one of the best cultivated Tkemalis, slightly ellipsoid, very red foliage and stems, tree height 7 m. Excellent for sauce, more sour than many yellow cultivars.	cultivated	Davis-QUAR
GE-2006-139	9/27/06	C	0	<i>Prunus</i>	<i>cerasifera vachutskii</i>	<b>Shota Alucha</b>	41.66898	45.73583	755	Kakheti	Garden of Marina's father, Shota Mosulishvili, in village of Arashenda. Tree was purchased in Tbilisi in mid-1970s.	Told that fruit are 4 cm diam., green and still sweet and tart, bright yellow when mature but eaten when green.	cultivated	Davis-QUAR
GE-2006-140	9/27/06	C	0	<i>Mespilus</i>	<i>germanica</i>	<b>Shota Medlar</b>	41.66898	45.73583	755	Kakheti	Garden of Marina's father, Shota Mosulishvili, in village of Arashenda. Tree was purchased in Tbilisi in mid-1970s.	Another large fruited medlar.	cultivated	Corvallis
GE-2006-141	9/27/06	C	0	<i>Ficus</i>	<i>carica</i>	<b>Arashendu Green Fig</b>	41.66898	45.73583	755	Kakheti	Garden of Marina's father, Shota Mosulishvili, in village of Arashenda. Tree was purchased in Tbilisi in mid-1970s.	Green when mature, very red, rich pulp, good sugar and acid, juicy while firm, no splitting despite rain, small ostiole, productive.	cultivated	Davis
GE-2006-142	9/27/06	S	0	<i>Quercus</i>	<i>iberica</i>	<b>Oak</b>	41.66898	45.73583	755	Kakheti	Large tree in pasture near village of Arushenda	Large spreading trees, 15-18 meters tall and wide. Long acorns, almost cylindrical collected from two trees, and ellipsoid nuts from a third tree.	wild	National Arboretum, Morris Arboretum
GE-2006-143	9/27/06	S	1	<i>Alcea</i>	<i>rugosa</i>	<b>Alcea</b>	41.72791	45.25775	842	Kakheti	Roadside near village of Patardzeuli.	Large, yellow flower, 5 petals and sepals, about 8 cm diam. lots of flowers late in season, seemingly adapted to v. dry conditions.	wild	Ames
GE-2006-144	9/30/06	S	0	<i>Vitis</i>	<i>sylvestris</i>	<b>wild Grape</b>	41.98820	44.51610	638	Kartli	Ksani River Gorge near Ksovrisi. Along garden fence.	Collected grapes growing about 50 m away (only Rkatsiteli). Fruit ~ 5mm diam, purple, not tenturier, fairly sweet.	wild	Davis
GE-2006-145	9/30/06	S	0	<i>Humulus</i>	<i>lupulus</i>	<b>Wild Hop</b>	41.98820	44.51610	638	Kartli	Ksani River Gorge near Ksovrisi. Along garden fence.	Weedy plants growing on fence along road.	wild	Corvallis
GE-2006-146	9/30/06	C	0	<i>Prunus</i>	<i>cerasus</i>		41.98820	44.51610	638	Kartli	Ksani River Gorge near Ksovrisi. In family garden.	May be a Ukrainian variety, grafted tree > 20 years old, source unknown. Large, dark purple fruit, sweet enough to eat out of hand, also good for juice, compotes.	cultivated	Davis-QUAR
GE-2006-147	9/30/06	C	0	<i>Pyrus</i>	<i>communis</i>	<b>Kunkula Mskali (Pear)</b>	41.98820	44.51610	638	Kartli	Ksani River Gorge near Ksovrisi. In family garden.	Early pear, first to ripen, elongated with red blush, scions from grafted tree.	cultivated	Corvallis-QUAR
GE-2006-148	9/30/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	<b>Apricot</b>	41.98820	44.51610	638	Kartli	Ksani River Gorge near Ksovrisi. In family garden.	Said to be large, orange, elongate, red-cheek, yellow flesh, very sweet fruit. Unknown source, tree has been in yard for more than 10 years. Grafted tree.	cultivated	Davis-QUAR

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GE-2006-149	9/30/06	C	0	<i>Pyrus</i>	<i>communis</i>	Sulani	41.98820	44.51610	638	Kartli	Ksani River Gorge near Ksovrisi. In family garden.		cultivated	Corvallis-QUAR
GE-2006-150	9/30/06	C	0	<i>Malus</i>	<i>x domestica</i>	Champanski Apple	41.98820	44.51610	638	Kartli	Ksani River Gorge near Ksovrisi. In family garden.	Russian variety, said to be summer apple, red and green skin, red streaks in flesh.	cultivated	Geneva-QUAR
GE-2006-151	9/30/06	S?	1	<i>Vitis</i>	<i>sylvestris</i>	Wild? Grape	41.98820	44.51610	638	Kartli	Ksani River Gorge near Ksovrisi. Along garden fence.	Plants in abandoned orchard in same garden, said to have been riparian forest 50 years ago when orchard was planted. Four very large vines growing together. Fairly large, loose clusters, berries 5 mm diam, dark purple with much color under skin. Growing about 80 m from a Rkatsiteli vineyard.	wild	
GE-2006-152	9/30/06	S?	1	<i>Vitis</i>	<i>sylvestris</i>	Wild? Grape	41.98820	44.51610	638	Kartli	Ksani River Gorge near Ksovrisi. Along garden fence.	Fruit clearly from different vine at same location as GE-151.	wild	
GE-2006-153	9/30/06	X	-			discarded	-	-	-					none
GE-2006-154	9/30/06	S	0	<i>Pyrus</i>	<i>salicifolia</i>	Wild Willow-leaf Pear	41.68206	43.10658	1082	Samtskhe-Javakheti	Near village of Salkuneti. On hillside to the south of the Mtkvari River.	Fruit from about 6 trees.	wild	Corvallis
GE-2006-155	9/30/06	H	2	<i>Vitis</i>	<i>sylvestris</i>	Wild Grape male - herbarium only	41.79573	43.30415	841	Samtskhe-Javakheti			wild	
GE-2006-156	9/30/06	S	0	<i>Vitis</i>	<i>sylvestris</i>	Wild Grape	41.81003	43.33495	828	Samtskhe-Javakheti		Plants growing in trees along river bank.	wild	Davis
GE-2006-157	9/30/06	S	0	<i>Vitis</i>	<i>sylvestris</i>	Wild Grape	41.81452	43.34622	823	Samtskhe-Javakheti	~ 0.5 km N of GE-156	Plants growing in trees along river bank.	wild	Davis

Sample #	Collection Date	Seed Cutting	Herbarium Samples	Genus	Species	Cultivar or Local Name	Latitude	Longitude	Elev. (m)	Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
<b>Armenia Samples</b>														
AM-2006-158	10/2/06	S	0	<i>Humulus</i>	<i>lupulus</i>	<b>Wild Hop</b>	41.10526	44.70679	648	Lori	North of Alaverdi, roadside above river bank.	seeds from several plants along 0.5 km - some with very large cones	wild	Armenia Genebank
AM-2006-159	10/2/06	H	1	<i>Vitis</i>	<i>sylvestris</i>	<b>Wild Grape - herbarium only</b>	41.10526	44.70679	648	Lori	North of Alaverdi, roadside above river bank.	Large, apparently wild grapevine growing along tree. Leaves more deeply lobed than any other <i>V. sylvestris</i> seen in Georgia.	wild	
AM-2006-160	10/2/06	S	1	<i>Vitis</i>	<i>sylvestris</i>	<b>Wild Grape</b>	41.10109	44.69691	683	Lori	North of Alaverdi, roadside above river bank.	Fruit from single vine. Only vine with fruit among 7 nearby vines.	wild	Davis
AM-2006-161	10/2/06	H	1	<i>Vitis</i>	<i>sylvestris</i>	<b>Wild Grape - herbarium only</b>	41.10109	44.69691	683	Lori	North of Alaverdi, roadside above river bank.	Male vine with distinctly red new growth.	wild	
AM-2006-162	10/4/06	S	0	<i>Pyrus</i>	<i>salicifolia</i>	<b>Willow Leaf Pear</b>	40.05576	44.78264	1722	Ararat	Near Khosrov Preserve.	Some trees with larger fruit (pollination?) and with wider leaves than other <i>P. salicifolia</i> . May be what Armenian botanists call <i>P. takhtajani</i>	wild	Corvallis
AM-2006-163	10/4/06	S	1	<i>Crataegus</i>	<i>pontica</i> (?)	<b>Large Orange Fruit Hawthorn</b>	40.05576	44.78264	1722	Ararat	near Khosrov Preserve. Waypoint 162.	Large, orange, and quite tasty fruit. Fruit from 12+ wild trees.	wild	Armenia Genebank
AM-2006-164	10/4/06	S	1	<i>Viburnum</i>	<i>lantana</i>	<b>Viburnum</b>	40.05732	44.79160	1833	Ararat	Near Khosrov Preserve. At top of very dry hillside. Associated vegetation: <i>Pyrus salicifolia</i> , <i>Crataegus pontica</i> , <i>Rhamnus</i> sp.	Shrub, many with green leaves. Seed collected from 4+ plants, primarily from plants showing bright copper-red fall color. Fruit juicy, black berries, dried like raisins.	wild	Armenia Genebank
AM-2006-165	10/4/06	?	1	<i>Malus</i>	<i>orientalis</i>	<b>Wild Apple</b>	40.05732	44.79160	1833	Ararat	Near Khosrov Preserve. At top of very dry hillside. Associated vegetation: <i>Pyrus salicifolia</i> , <i>Crataegus pontica</i> , <i>Rhamnus</i> sp.	One of three <i>Malus</i> trees, with no others nearby. Seed collected from one tree.	wild	none
AM-2006-166	10/4/06	S	2	<i>Pyrus</i>	<i>salicifolia</i>	<b>Wild Willowleaf Pear</b>	40.05732	44.79160	1833	Ararat	Near Khosrov Preserve. At top of very dry hillside. Associated vegetation: <i>Pyrus salicifolia</i> , <i>Crataegus pontica</i> , <i>Rhamnus</i> sp.	Typical foliage, but larger than average fruit. Seed collected from 10+ trees. During seed extraction, larger fruit contained more seeds, suggesting association between pollination and fruit size.	wild	Corvallis
AM-2006-167	10/4/06	S	1	<i>Sorbus</i>	<i>graeca</i>	<b>Mountain Ash</b>	40.05732	44.79160	1833	Ararat	Near Khosrov Preserve. At top of very dry hillside. Associated vegetation: <i>Pyrus salicifolia</i> , <i>Crataegus pontica</i> , <i>Rhamnus</i> sp.	Beautiful, multi-stem, shrubby tree with bright red berries. Wood said to be beautiful, used for walking sticks and other items. Seed collected from 6+ trees.	wild	Corvallis
AM-2006-168	10/4/06	S	1	<i>Rosa</i>	sp.	<b>Black-hip Rose</b>	40.05732	44.79160	1833	Ararat	Near Khosrov Preserve. At top of very dry hillside. Associated vegetation: <i>Pyrus salicifolia</i> , <i>Crataegus pontica</i> , <i>Rhamnus</i> sp.	Rose with very black hips. Seed collected from 3 nearby plants.	wild	Armenia Genebank
AM-2006-169	10/4/06	S	1	<i>Juniperus</i>	<i>depressa</i>	<b>Procumbent Juniper</b>	40.05732	44.79160	1833	Ararat	Near Khosrov Preserve. At top of very dry hillside. Associated vegetation: <i>Pyrus salicifolia</i> , <i>Crataegus pontica</i> , <i>Rhamnus</i> sp.	Procumbent, spreading juniper with blue-gray fruits. Fruits present all along branches in large numbers.	wild	Armenia Genebank
AM-2006-170	10/4/06	S	1	<i>Acer</i>	<i>iberica</i>	<b>Maple</b>	40.05732	44.79160	1833	Ararat	Near Khosrov Preserve. At top of very dry hillside. Associated vegetation: <i>Pyrus salicifolia</i> , <i>Crataegus pontica</i> , <i>Rhamnus</i> sp.	Multi-stemmed trunk, lovely tree with very small, 3 lobed leaves. Typical samara, but very few still present on tree. Many leaves have black, necrotic lesions. Seed collected from single tree.	wild	Armenia Genebank
AM-2006-171	10/4/06	S	2	<i>Prunus</i>	<i>fenziiana</i>	<b>Wild Almond</b>	39.94928	44.90560	1253	Ararat	Near Khosrov Preserve, very dry slope on very droughty soil. (collected after AM-173)	Shrubby small trees, 2-4 m tall. Fruits look like small almonds, most are pierced, as though with fine drill (insect damage). Seed collected from 10+ trees.	wild	Armenia Genebank
AM-2006-172	10/4/06	S	1	<i>Prunus</i>	<i>incana</i>		40.05576	44.78264	1722	Ararat	near Khosrov Preserve	Shrub with spiny branches. Fruit small, dried, adhering to stems. Seed from single plant.	wild	Armenia Genebank
AM-2006-173	10/4/06	S	0	<i>Prunus</i>	<i>incana</i>		40.06530	44.79196	1664	Ararat	Very dry hillside not far from AM-167.	Fruit reddish-brown, dried flesh covering small pit. Seed collected from 6+ plants.	wild	Armenia Genebank
AM-2006-174	10/5/06	X	-			<b>no sample</b>				Ararat				none
AM-2006-175	10/5/06	CS	0	<i>Morus</i>	<i>nigra</i>	<b>Black Mulberry (Ckare Tut)</b>	39.69838	45.21070	1238	Ararat	Near Novavank, dry canyon, tree planted by café.	Grafted tree about 4m tall, said to have fruit from July - Sept. Found three dried fruit on tree, extracted 3 seeds. "Ckare" means "mixed".	cultivated	Davis
AM-2006-176	10/5/06	-	1	<i>Prunus</i>	<i>divaricata</i>	<b>Herbarium only</b>	39.90426	45.49585	1998	Ararat	Gorge of Eghegis River near Gulliduz village.	Numerous <i>P. divaricata</i> trees scattered among <i>Salix</i> and <i>Fraxinus</i> .	wild	none
AM-2006-177	10/5/06	SC	0	<i>Juglans</i>	<i>regia</i>	<b>Walnut - Old Eghegis Landrace</b>	39.90426	45.49585	1998	Ararat	Gorge of Eghegis River near Gulliduz village.	Enormous old trees to 20m tall, >300 years. Nut size variable. Seed collected from 5+ trees, cuttings from 2nd oldest tree in grove.	wild	Davis
AM-2006-178	10/5/06	S	0	<i>Juglans</i>	<i>regia</i>	<b>Walnut - Older Eghegis Landrace</b>	39.90426	45.49585	1998	Ararat	Gorge of Eghegis River near Gulliduz village.	Huge old tree about 20m tall, about 2m diam, with major branch fallen, leaving void in trunk. Nuts average size, somewhat flattened.	wild	Davis
AM-2006-179	10/5/06	S	0	<i>Pyrus</i>	<i>salicifolia</i>	<b>Wild Willowleaf Pear</b>	39.87758	45.45788	1742	Ararat	Gorge of Eghegis River. Dry hillside, near AM-177.	Fruit 2.5-3.0 cm long, 2.5 cm diam. Seed collected from single tree.	wild	Corvallis
AM-2006-180	10/5/06	S	0	<i>Pyrus</i>	<i>salicifolia</i>	<b>Wild Willowleaf Pear</b>	39.90479	45.49488	2045	Ararat	Gorge of Eghegis River. Dry hillside, near AM-177.	Typical <i>P. salicifolia</i> .	wild	Corvallis

Sample #	Collection Date	Seed Cutting	Herbarium Samples	Herbarium			Elev.			Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
				Genus	Species	Cultivar or Local Name	Latitude	Longitude	(m)					
AM-2006-181	10/5/06	S	0	<i>Malus</i>	<i>orientalis</i>	Wild Apple	39.90177	45.49558	2023	Ararat	Top of Gorge of Eghegis River - "Medieval Garden". Moist hillside at top of gorge.	Tall, old tree about 6m. Fruit yellow, hard, 2.5 - 4.0 cm diam. Fruit collected from 2 trees.	wild	Armenia Genebank
AM-2006-182	10/5/06	S	0	<i>Acer</i>	<i>iberica</i>	Maple	39.90177	45.49558	2023	Ararat	Top of Gorge of Eghegis River - "Medieval Garden". Dry hillside, near AM-177.	Trees of varying heights. Seed collected from several trees showing red-yellow fall color.	wild	Armenia Genebank
AM-2006-183	10/5/06	S	0	<i>Prunus</i>	<i>divaricata</i>	Red Landrace	39.90177	45.49558	2023	Ararat	Top of Gorge of Eghegis River - "Medieval Garden"	Very red peel, orange flesh, variable flavor and texture. Fruits collected from ~5 trees.	wild	Armenia Genebank
AM-2006-184	10/5/06	S	0	<i>Prunus</i>	<i>divaricata</i>	Yellow Landrace	39.90177	45.49558	2023	Ararat	Top of Gorge of Eghegis River - "Medieval Garden"	Orange peel when ripe, yellow flesh. Fruits collected from 2 trees, one with great flavor, one with very large fruit.	wild	Armenia Genebank
AM-2006-185	10/5/06	S	1	<i>Pyrus</i>	<i>salicifolia</i> hybrid	P. voronovii - hybrid "species"	39.90177	45.49558	2023	Ararat	Top of Gorge of Eghegis River - "Medieval Garden". Associated with many <i>Prunus divaricata</i> and <i>Malus orientalis</i> trees.	Fruit collected from several trees that appear to be intermediate between <i>P. salicifolia</i> and other species, probably <i>P. salicifolia</i> and other species, probably <i>P. caucasica</i> . Fruit like that of <i>P. salicifolia</i> , oriented in random directions	wild	Corvallis
AM-2006-186	10/5/06	S	1	<i>Pyrus</i>	hybrid	Large fruited P. salicifolia hybrid	39.90177	45.49558	2023	Ararat	Top of Gorge of Eghegis River - "Medieval Garden"	Larger leaves and larger fruit than typical <i>P. salicifolia</i> . Other hybrid trees nearby, but no cultivated pears within many kilometers. Presence of many <i>Malus</i> , <i>Pyrus</i> and <i>Prunus</i> trees suggest that this may have been a landrace orchard in ancient times. 3 overripe fruit, hanging vertically on peduncle picked from one tree. One larger overripe fruit, about 4cm long, was found stuck between branches on another tree.	wild	Corvallis
AM-2006-187	10/6/06	S	1	<i>Eleagnus</i>	<i>angustifolia</i>	(possibly <i>E. orientalis</i> )	39.75146	45.32409	1160	Vayots Dzor	near office of USDA Goat Industry Development Project office in Yeghegnadzor	Row of seedling trees by highway, planted at edge of field. Tall, gangly, willow shrubs. Fruits soft and ripe, but still securely hanging on trees.	cultivated	National Arboretum
AM-2006-188	10/6/06	S	1	<i>Prunus</i>	<i>fenzliana</i>	Wild Almond	39.68981	45.51414	1321	Vayots Dzor	A few kilometers down road from AM-187. Dry hillside, small scattered shrubs and grass.		wild	Armenia Genebank
AM-2006-189	10/6/06	S	0	<i>Humulus</i>	<i>lupulus</i>	Hops	39.48778	46.35215	1224	Vayots Dzor	Roadside just east of Goris		wild	Armenia Genebank
AM-2006-190	10/6/06	S	0	<i>Prunus</i>	<i>spinosa</i>		39.45552	46.37231	1025	Vayots Dzor	Roadside just east of Goris		wild	Armenia Genebank
AM-2006-191	10/6/06	S	0	<i>Pistacia</i>	<i>mutica</i>	Wild Pistacio	39.44162	46.39508	899	Syunik	Arid Switchbacks enroute to Kapan		wild	Davis
AM-2006-192	10/6/06	S	0	<i>Punica</i>	<i>granatum</i>	Wild Pomegranate	39.44162	46.39508	899	Syunik	Arid Switchbacks enroute to Kapan		wild	Davis
AM-2006-193	10/6/06	S	0	<i>Ficus</i>	<i>carica</i>	Wild Fig - succulent	39.44162	46.39508	899	Syunik	Arid Switchbacks enroute to Kapan		wild	Davis
AM-2006-194	10/6/06	S	0	<i>Ficus</i>	<i>carica</i>	Wild Fig - Capri type	39.44162	46.39508	899	Syunik	Arid Switchbacks enroute to Kapan		wild	Davis
AM-2006-195	10/6/06	S	1	<i>Vitis</i>	<i>sylvestris</i>	Old Grape - possibly wild	39.44162	46.39508	899	Syunik	Arid Switchbacks enroute to Kapan	2 fruits collected	wild	Davis
AM-2006-196	10/6/06	SC	0	<i>Mespilus</i>	<i>germanica</i>	Wild Medlar	39.38711	46.39055	1481	Syunik	Enroute to Kapan. Deciduous Forest near Azerbaijan border, beware of landmines.		wild	Corvallis
AM-2006-197	10/7/06	C	0	<i>Mespilus</i>	<i>germanica</i>	Large Fruited Medlar 'Norashenik'	39.26945	46.38903	1073	Syunik	Garden of Vladik's Dacha in village of Norashenik near Kapan.	Large fruited medlar. Two trees in garden said to be same variety. One grafted on quince rootstock had fruit twice the size of the other, which was on <i>Mespilus</i> root. Scions collected from the larger-fruited tree on quince rootstock.	cultivated	Corvallis
AM-2006-198	10/7/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	Quince 'Norashenik'	39.26945	46.38903	1073	Syunik	Garden of Vladik's Dacha in village of Norashenik near Kapan.	Medium to large, yellow, apple shaped fruit with slight neck.	cultivated	Corvallis-QUAR
AM-2006-199	10/7/06	C	0	<i>Pyrus</i>	<i>communis</i>	Pear 'Norashenik'	39.26945	46.38903	1073	Syunik	Garden of Vladik's Dacha in village of Norashenik near Kapan.	Self-rooted tree, said to be propagated in village by digging root suckers. Fruit small, soft & sweet, said to ripen in June - July.	cultivated	Corvallis-QUAR
AM-2006-200	10/7/06	S	1	<i>Pyrus</i>	<i>caucasica</i>	Wild Pear	39.29424	46.32235	1215	Syunik	Chanachi Forest near Norashenik. Clearing in deciduous forest.	Fruit from ground under 6 trees scattered in clearings along 1 km path through forest. Appear to be typical <i>P. caucasica</i> .	wild	Corvallis
AM-2006-201	10/7/06	S	0	<i>Mespilus</i>	<i>germanica</i>	Wild Medlar	39.29424	46.32235	1215	Syunik	Chanachi Forest near Norashenik. Deciduous forest.	Fruit from about 4 trees scattered along 0.5 km path. Small fruited, wild medlars.	wild	Corvallis
AM-2006-202	10/7/06	S	0	<i>Cornus</i>	<i>mas</i>	Cornelian Cherry	39.29424	46.32235	1215	Syunik	Chanachi Forest near Norashenik. Deciduous forest.	Fruit from 2 plants.		Armenia Genebank
AM-2006-203	10/7/06	S	0	<i>Malus</i>	<i>orientalis</i>	Wild Apple	39.29459	46.31500	1308	Syunik	Chanachi Forest near Norashenik. Deciduous Forest with <i>Quercus</i> , <i>Pyrus</i> , <i>Crataegus</i> , <i>Fraxinus</i> .	Fruit green to yellow, some with slight red blush, 3-4 cm diam. Fruit collected from ~4 medium size trees to 5m high.	wild	Armenia Genebank
AM-2006-204	10/7/06	S	0	<i>Prunus</i>	<i>divaricata</i>	Shlor	39.29459	46.31500	1308	Syunik	Chanachi Forest near Norashenik. Deciduous forest.	Fruit from 3 trees, all purple fruited, 1 tree with v. large fruit, 1 with low astringency. 'Shlor' is local name for this fruit.	wild	Armenia Genebank
AM-2006-205	10/7/06	S	0	<i>Humulus</i>	<i>lupulus</i>	Wild Hop	39.29459	46.31500	1308	Syunik	Chanachi Forest near Norashenik. Deciduous forest.		wild	Armenia Genebank



Sample #	Collection Date	Seed Cutting	Herbarium Samples	Genus	Species	Cultivar or Local Name	Latitude	Longitude	Elev. (m)	Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
AM-2006-206	10/7/06	S	0	<i>Juglans</i>	<i>regia</i>	Wild Walnut	39.29424	46.32235	1215	Syunik	Chanachi Forest near Norashenik. Deciduous forest.	Landrace collection from two old trees, one 200-500 years old in village, the other 50-200 years old in forest.	wild	Davis
AM-2006-207	10/7/06	C	0	<i>Pyrus</i>	<i>communis</i>	Meghratanz (Honey Pear)	39.28934	46.33680	1149	Syunik	Chanachi Forest near Norashenik. Deciduous forest.	Very old (perhaps 200 years) grafted tree, between village and forest. Landrace tree used by local people - possibly selection from wild with larger and sweeter fruit than wild <i>P. caucasica</i> .	cultivated	Corvallis-QUAR
AM-2006-208	10/7/06	-	0	<i>Malus</i>	<i>orientalis</i>	Wild Apple - larger fruit - Discarded	39.28934	46.33680	1149	Syunik	Chanachi Forest near Norashenik. Deciduous forest.	Fruit from single tree with larger fruit than other <i>M. orientalis</i> deeper in forest.	none	
AM-2006-209	10/7/06	S	0	<i>Malus</i>	<i>orientalis</i>	Wild Apple	39.32140	46.31823	1568	Syunik	Chanachi Forest near Norashenik. Deciduous forest. Different valley than previous samples.	Fruit from several trees along forest road. Next valley over from AM-208.	wild	Armenia Genebank
AM-2006-210	10/7/06	C	0	<i>Mespilus</i>	<i>germanica</i>	Wild Medlar	39.31530	46.30283	1876	Syunik	Chanachi Forest near Norashenik. Deciduous forest, top of road near incredible view.	Cuttings (seed?)	cultivated	Corvallis
AM-2006-211	10/7/06	S	1	<i>Sorbus</i>	<i>torminalis</i>	Mountain Ash	39.32140	46.31823	1568	Syunik	Chanachi Forest near Norashenik. Deciduous forest, clearing along road.	Branches had been collected by two boys by side of road, who appeared to be eating the very astringent fruits. Our guide coaxed them to give him a branch.	wild	Armenia Genebank
AM-2006-212	10/7/06	S	1	<i>Vitis</i>	<i>sylvestris</i>	Wild Grape	39.25134	46.38584	1173	Syunik	Chanachi Forest near Norashenik. Deciduous forest.	Small blue-black berries, tart, fairly old vine. Leaves have fairly narrow petiolar sinus. AM-212 and AM-213 are the only fruit-bearing vines among about 8 visible in an area along a mountain road. There may be more vines below or above.	wild	Davis
AM-2006-213	10/7/06	S	1	<i>Vitis</i>	<i>sylvestris</i>	Wild Grape	39.25134	46.38584	1173	Syunik	Chanachi Forest near Norashenik. Deciduous forest.	Like AM-212 and just 60m away, but more senescent leaves and much wider petiolar sinus. AM-212 and AM-213 are the only fruit-bearing vines among about 8 visible in an area along a mountain road. There may be more vines below or above.	wild	Davis
AM-2006-214	10/7/06	S	0	<i>Cotinus</i>	<i>cogigria</i>	Smoke Plant	39.25134	46.38584	1173	Syunik	Chanachi Forest near Norashenik. Deciduous forest.		wild	Armenia Genebank
AM-2006-215	10/8/06	?	0	<i>Vitis</i>	<i>sylvestris</i>	Wild Grape	39.12533	46.47161	1021	Syunik	Chanachi Forest near Norashenik. Deciduous forest.			
AM-2006-216	10/8/06	-	-	-	-	no sample						Ficus collected, then discarded.		none
AM-2006-217	10/8/06	S	0	<i>Pyrus</i>	<i>salicifolia</i>	Willow Leaf Pear	39.04806	46.49885	1010	Syunik	Edge of Shigahogh Preserve	seed from 3 trees	wild	Corvallis
AM-2006-218	10/8/06	S	1	<i>Prunus</i>	<i>fenziana</i>		39.04806	46.49885	1010	Syunik	Edge of Shigahogh Preserve	seed from ~12 trees	wild	Armenia Genebank
AM-2006-219	10/8/06	CS	0	<i>Mespilus</i>	<i>germanica</i>	Medlar	39.04806	46.49885	1010	Syunik	Edge of Shigahogh Preserve	small fruited, wild medlar.	wild	Corvallis
AM-2006-220	10/8/06	S	0	<i>Juglans</i>	<i>regia</i>	Wild Walnut	39.05687	46.52572	731	Syunik	Old Platanus Grove at Shigahogh	Seed from several trees in Platanus Grove and road beyond abandoned village of Hand.	wild	Davis
AM-2006-221	10/8/06	S	0	<i>Platanus</i>	<i>orientalis</i>	Plane Tree	39.05687	46.52572	731	Syunik	Old Platanus Grove at Shigahogh	Platanus was a holy tree used in pagan religions.	wild	Armenia Genebank
AM-2006-222	10/8/06	C	0	<i>Pyrus</i>	<i>communis</i>	Ashnan Tandz (Autumn Pear)	39.05687	46.52572	731	Syunik	Garden in Nerkin Hand Village	Short and very broad, medium/large fruit. Shape resembles quince or Sorbopyrus. Ripe in November.	cultivated	Corvallis-QUAR
AM-2006-223	10/8/06	C	0	<i>Punica</i>	<i>granatum</i>	Early Sweet Pomegranate	39.05687	46.52572	731	Syunik	Garden in Nerkin Hand Village	semihard seeds	cultivated	Davis
AM-2006-224	10/8/06	C	0	<i>Punica</i>	<i>granatum</i>	Late Sour Pomegranate	39.05687	46.52572	731	Syunik	Garden in Nerkin Hand Village	late, sour, very red arils, yellow outside with red blush	cultivated	Davis
AM-2006-225	10/8/06	C	0	<i>Pyrus</i>	<i>communis</i>	Hand Village Pear	39.03999	46.51708	870	Syunik	Old hillside orchard near abandoned village of Hand.	100+ year old grafted tree. No fruit, may be early ripe.	cultivated	Corvallis-QUAR
AM-2006-226	10/8/06	C	0	<i>Pyrus</i>	<i>communis</i>	Hand Winter Pear	39.03999	46.51708	870	Syunik	Old hillside orchard near abandoned village of Hand.	Medium size, winter pear with long peduncle. Coarse texture, crunchy, sweet, almost ripe on 10/8/2006. Large glossy leaves, some serration suggest Asian pear in background. Many fruit on tree, several trees with identical fruit nearby, no evidence of graft unions on this variety. Landrace Pear. See photos 531 & 532.	cultivated	Corvallis-QUAR
AM-2006-227	10/8/06	C	0	<i>Morus</i>	<i>nigra?</i>	Mulberry	39.03999	46.51708	870	Syunik	Old hillside orchard near abandoned village of Hand.	Alba size tree, but old. Said to be tasty, black fruit that are ripe for 2 months beginning in July.	cultivated	Davis
AM-2006-228	10/8/06	S	0	<i>Cydonia</i>	<i>oblonga</i>	Hand Quince	39.03999	46.51708	870	Syunik	Old hillside orchard near abandoned village of Hand.	Fruit round, apple shape, small to medium size.	cultivated	Corvallis
AM-2006-229	10/8/06	S	1	<i>Vitis</i>	<i>sylvestris</i>	Wild Grape - white fruit	39.07344	46.50176	1130	Syunik	north facing ridge along road to Shigahogh Village	white fruit	wild	Davis
AM-2006-230	10/8/06	S	1	<i>Vitis</i>	<i>sylvestris</i>	Wild Grape	39.08697	46.49484	969	Syunik	north facing ridge along road to Shigahogh Village	purple fruit	wild	Davis
AM-2006-231	10/8/06	S	1	<i>Prunus</i>	<i>avium</i>	Wild Cherry	39.08697	46.49484	969	Syunik	north facing ridge along road to Shigahogh Village		wild	Davis-QUAR
AM-2006-232	10/9/06	S	1	<i>Prunus</i>	<i>nairica</i>		38.86897	46.18506	780	Syunik	Outskirts of Agarak, arid, rocky hillside		wild	Armenia Genebank
AM-2006-233	10/9/06	S	1	<i>Jasminum</i>	<i>fruticosum</i>	Jasmine	38.86897	46.18506	780	Syunik	Outskirts of Agarak, arid, rocky hillside	Yellow flowers (said to have)	wild	Armenia Genebank

Sample #	Collection Date	Seed Cutting	Herbarium Samples				Cultivar or Local Name	Latitude	Longitude	Elev. (m)	Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
			Genus	Species											
AM-2006-234	10/9/06	S	1	<i>Prunus</i>	<i>microcarpa</i>	<i>Cerasus azaxina?</i>	38.86897	46.18506	780	Syunik	Outskirts of Agarak, arid, rocky hillside	Seed collected from 2 plants.	wild	Armenia Genebank	
AM-2006-235	10/9/06	S	0	<i>Pistacia</i>	<i>mutica</i>	<b>Wild Pistacio</b>	38.91764	46.36731	497	Syunik	Roadside along Iran border.	Many with holes drilled in seed by arthropods? sorted to remove all with holes	wild	Davis	
AM-2006-236	10/9/06	S	1	<i>Morus</i>	<i>nigra</i>	<b>Black Mulberry</b>	38.91764	46.36731	497	Syunik	Roadside along Iran border.		cultivated	Davis	
AM-2006-237	10/9/06	S	1	<i>Prunus</i>	<i>fenziiana</i>	<i>Prunus nairica?</i>	38.94138	46.38234	767	Syunik	Dry valley just north of Iran border near village of Shvanaidzor. Along new road to Kapan.		wild	Armenia Genebank	
AM-2006-238	10/9/06	S	0	<i>Ficus</i>	<i>carica</i>	<b>Wild Fig?</b>	38.94138	46.38234	767	Syunik	Dry valley just north of Iran border near village of Shvanaidzor. Along new road to Kapan.		wild	Davis	
AM-2006-239	10/9/06	S	0	<i>Pistacia</i>	<i>mutica</i>	<b>Wild Pistacia</b>	38.94138	46.38234	767	Syunik	Dry valley just north of Iran border near village of Shvanaidzor. Along new road to Kapan.	Larger seed, biege exocarp compared to 241	wild	Davis	
AM-2006-240	10/9/06	S	0	<i>Prunus</i>	<i>microcarpa</i>	<i>Cerasus azaxina?</i>	38.94138	46.38234	767	Syunik	Dry valley just north of Iran border near village of Shvanaidzor. Along new road to Kapan.		wild	Armenia Genebank	
AM-2006-241	10/9/06	S	0	<i>Pistacia</i>	<i>mutica</i>	<b>Wild Pistacia</b>	38.94138	46.38234	767	Syunik	Dry valley just north of Iran border near village of Shvanaidzor. Along new road to Kapan. Several hundred meters from AM-239	Very red exocarp, smaller seed than 239	wild	Davis	
AM-2006-242	10/9/06	C	0	<i>Punica</i>	<i>granatum</i>	<b>Kaghtsr Kapuyt (=Sweet Blue) Yellow Pomegranate</b>	38.93195	46.36992	630	Syunik	Shvanaidzor Village, Pomegranate Orchard.	Yellow skin, sweet, pink arils, hard seeds, keeps well.	cultivated	Davis	
AM-2006-243	10/9/06	C	0	<i>Punica</i>	<i>granatum</i>	<b>Kaghtsr Nur (= sweet pomegranate)</b>	38.93195	46.36992	630	Syunik	Shvanaidzor Village, Pomegranate Orchard.	Yellow with pink cast, sweet rich flavor, pink arils.	cultivated	Davis	
AM-2006-244	10/9/06	C	0	<i>Punica</i>	<i>granatum</i>	<b>Guloshan</b>	38.93195	46.36992	630	Syunik	Shvanaidzor Village, Pomegranate Orchard.	Large, red-orange skin. Sour. Bright red arils (darkest aril color in this orchard). Name suggests Persian origin. Fruit said to keep until spring.	cultivated	Davis	
AM-2006-245	10/9/06	C	0	<i>Punica</i>	<i>granatum</i>	<b>Tetvash Kapuyt (=Sour Blue) Yellow Pomegranate</b>	38.93195	46.36992	630	Syunik	Shvanaidzor Village, Pomegranate Orchard.	Yellow skin, keeps until spring. Said to have evolved from a bluish form.	cultivated	Davis	
AM-2006-246	10/9/06	C	0	<i>Punica</i>	<i>granatum</i>	<b>Karmir Nur (= Red Pomegranate)</b>	38.93195	46.36992	630	Syunik	Shvanaidzor Village, Pomegranate Orchard.	Red skin, large, early ripe, doesn't store well.	cultivated	Davis	
AM-2006-247	10/9/06	C	0	<i>Punica</i>	<i>granatum</i>	<b>Hahchapaki (=Crystal)</b>	38.93195	46.36992	630	Syunik	Shvanaidzor Village.	Local selection, recently named by people in village. Large, yellow fruit with large pink arils. Hard seeds.	cultivated	Davis	
AM-2006-248	10/9/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	<b>Kaghtsr Serkevil (Sweet Quince)</b>	38.93195	46.36992	630	Syunik	Shvanaidzor Village, Hrant's Garden by House.		cultivated	Corvallis-QUAR	
AM-2006-249	10/9/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	<b>Ttvash Serkevil (Sour Quince)</b>	38.93195	46.36992	630	Syunik	Shvanaidzor Village, Hrant's Garden by House.	Large, round, yellow, used for muraba (preserves). See photo of fruit arranged along board.	cultivated	Corvallis-QUAR	
AM-2006-250	10/9/06	C	0	<i>Ficus</i>	<i>carica</i>	<b>Large Green Fig</b>	38.93195	46.36992	630	Syunik	Shvanaidzor Village, Hrant's Garden by House.	Large, green fig, with amber/beige interior, rich flavor.	cultivated	Davis	
AM-2006-251	10/9/06	S	0	<i>Humulus</i>	<i>lupulus</i>	<b>Wild Hop</b>	38.90012	46.24802	623	Syunik	Downtown Meghri, growing as weed along brushy roadside in town.		wild	Armenia Genebank	
AM-2006-252	10/9/06	C	0	<i>Punica</i>	<i>granatum</i>	<b>Agarak Deghin</b>	38.86897	46.18506	780	Syunik	Outskirts of Agarak, arid, rocky hillside	Large, yellow rind, light pink arils, very sweet.	cultivated	Davis	
AM-2006-253	10/9/06	S	0	<i>Prunus</i>	<i>nairica</i>	<b>(Prunus fenziiana?)</b>	38.91764	46.36731	497	Syunik	Roadside along Iran border.	Not quite as thorny as P. nairica AM-232	wild	Armenia Genebank	
AM-2006-254	10/10/06	C	0	<i>Pyrus</i>	<i>communis</i>	<b>Andriani Tandz (Andriani's Pear)</b>	38.90012	46.24802	623	Syunik	1 km north of this waypoint, in Misha Azatyan's Garden	Local variety, large, yellow, early, ripe July August.	cultivated	Corvallis-QUAR	
AM-2006-255	10/10/06	C	0	<i>Punica</i>	<i>granatum</i>	<b>Meghri Sweet</b>	38.90012	46.24802	623	Syunik	1 km north of this waypoint, in Misha Azatyan's Garden	Local variety, yellow with pink blush and pink arils, sweet, hard seeds, virtually thornless.	cultivated	Davis	
AM-2006-256	10/10/06	S	0	<i>Eriobotrya</i>	<i>japonica</i>	<b>Meghri Loquat</b>	38.90012	46.24802	623	Syunik	1 km north of this waypoint, in Misha Azatyan's Garden	Told that it is medium size, orange, tastes of amaretto.	cultivated	Davis	
AM-2006-257	10/10/06	C	0	<i>Diospyros</i>	<i>kaki</i>	<b>Meghri Persimmon</b>	38.90012	46.24802	623	Syunik	1 km north of this waypoint, in Misha Azatyan's Garden	Astringency varies with seed set.	cultivated	Davis	
AM-2006-258	10/10/06	C	0	<i>Punica</i>	<i>granatum</i>	<b>Meghri Pomegranate</b>	38.90012	46.24802	623	Syunik	1 km north of this waypoint, in Misha Azatyan's Garden	Very red, did not taste.	cultivated	Davis	
AM-2006-259	10/10/06	S	0	<i>Malus</i>	<i>orientalis</i>	<b>Wild Apple</b>	39.09481	46.17041	2066	Syunik	Mountains north of Meghri, deciduous forest.	Prolific old tree, yellow-green fruit. Seemed to be only Malus tree seen in area.	wild	Armenia Genebank	
AM-2006-260	10/10/06	-	0	<i>Prunus</i>	<i>divaricata</i>	<b>discarded</b>	39.09481	46.17041	2066	Syunik	Mountains north of Meghri, deciduous forest.	Species very common in area. Fruit selected from 3 trees, yellow, pink blotch, and pink fruit.		none	
AM-2006-261	10/10/06	S	1	<i>Pyrus</i>	<i>salicifolia</i>	<b>Willow Leaf Pear</b>	39.09481	46.17041	2066	Syunik	Mountains north of Meghri, deciduous forest.	Leaves wider than typical salicifolia, pubescent underside, glabrous top.	wild	Corvallis	
AM-2006-262	10/10/06	S	1	<i>Acer</i>	<i>hyrcanum</i>	<b>Maple</b>	39.09481	46.17041	2066	Syunik	Bright, red-orange fall color.		wild	Armenia Genebank	
AM-2006-263	10/10/06	S	0	<i>Acer</i>	<i>hyrcanum</i>	<b>Maple</b>	39.09481	46.17041	2066	Syunik	Not very colorful, but fruit are retained after leaf-fall.		wild	Armenia Genebank	
AM-2006-264	10/10/06	S	0	<i>Mentha</i>	<i>longifolia</i>	<b>Mint</b>	39.09481	46.17041	2066	Syunik			wild	Armenia Genebank	
AM-2006-265	10/10/06	S	1	<i>Prunus</i>	<i>avium?</i>	<b>Cherry?</b>	39.09481	46.17041	2066	Syunik	South of Goris, roadside fencerow.		cultivated	Davis-QUAR	
AM-2006-266	10/10/06	C	0	<i>Ficus</i>	<i>carica</i>	<b>Wild? Fig</b>	39.68617	45.49414	1277	Vayots Dzor	Capra fig on side of road, no other figs for many kilometers. Very narrow leaves.		wild	Davis	

Sample #	Collection Date	Seed Cutting	Herbarium Samples	Genus	Species	Cultivar or Local Name	Latitude	Longitude	Elev. (m)	Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
AM-2006-267	10/13/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	(Beketovski Unknown Selection? Morikian Selection?)	40.07934	43.98934	891	Ararat	Field planting of the Center for Viticulture, Fruit Growing and Wine Making at Nalbandian Village.	Traditional varieties collected from the Village of Oshkan in Ararat region by Edvard Morikian (died 2003). Names have been lost, and they have given numbers to distinguish them from each other. We randomly selected two cultivars that still had their painted numbers visible.	cultivated	Davis-QUAR
AM-2006-268	10/13/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	Morikian No. 9	40.07934	43.98934	891	Ararat	Field planting of the Center for Viticulture, Fruit Growing and Wine Making at Nalbandian Village.	Traditional varieties collected from the Village of Oshkan in Ararat region by Edvard Morikian (died 2003). Names have been lost, and they have given numbers to distinguish them from each other. We randomly selected two cultivars that still had their painted numbers visible.	cultivated	Davis-QUAR
AM-2006-269	10/13/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	Yerevanian	40.07934	43.98934	891	Ararat	Field planting of the Center for Viticulture, Fruit Growing and Wine Making at Nalbandian Village.	Traditional varieties collected from the Village of Oshkan in Ararat region by Edvard Morikian (died 2003). Names have been lost, and they have given numbers to distinguish them from each other. We randomly selected two cultivars that still had their painted numbers visible. Yerevanian is described in Armenian fruit volume 1.	cultivated	Davis-QUAR
AM-2006-270	10/13/06	C	0	<i>Prunus</i>	<i>dulcis</i>	Beketovski 1-13 (Aboviani - after the poet)	40.09075	43.79885	1010	Ararat	Orchard of Mr. Robert Asatrian near village of Vanand (near Turkish border). Numbered selections grown by Dmitri Begetovski's father Alexi Nikolai Begetovski, from seed collected from two almonds at Nikita Botanic Garden in Ukraine (Nikitski-1 and Nikitski 2). Thought to be traditional Armenian cultivars when we collected cuttings.	Big fruit.	cultivated	Davis-QUAR
AM-2006-271	10/13/06	C	0	<i>Prunus</i>	<i>dulcis</i>	Beketovski 3-33	40.09075	43.79885	1010	Ararat	Orchard of Mr. Robert Asatrian near village of Vanand (near Turkish border). Numbered selections grown by Dmitri Begetovski's father Alexi Nikolai Begetovski, from seed collected from two almonds at Nikita Botanic Garden in Ukraine (Nikitski-1 and Nikitski 2). Thought to be traditional Armenian cultivars when we collected cuttings.		cultivated	Davis-QUAR
AM-2006-272	10/13/06	C	0	<i>Prunus</i>	<i>dulcis</i>	Beketovski 6-11	40.09075	43.79885	1010	Ararat	Orchard of Mr. Robert Asatrian near village of Vanand (near Turkish border). Numbered selections grown by Dmitri Begetovski's father Alexi Nikolai Begetovski, from seed collected from two almonds at Nikita Botanic Garden in Ukraine (Nikitski-1 and Nikitski 2). Thought to be traditional Armenian cultivars when we collected cuttings.	very large fruit	cultivated	Davis-QUAR
AM-2006-273	10/13/06	C	0	<i>Prunus</i>	<i>dulcis</i>	Beketovski 6-26	40.09075	43.79885	1010	Ararat	Orchard of Mr. Robert Asatrian near village of Vanand (near Turkish border). Numbered selections grown by Dmitri Begetovski's father Alexi Nikolai Begetovski, from seed collected from two almonds at Nikita Botanic Garden in Ukraine (Nikitski-1 and Nikitski 2). Thought to be traditional Armenian cultivars when we collected cuttings.	very soft shell	cultivated	Davis-QUAR
AM-2006-274	10/13/06	C	0	<i>Prunus</i>	<i>dulcis</i>	Beketovski 16-11	40.09075	43.79885	1010	Ararat	Orchard of Mr. Robert Asatrian near village of Vanand (near Turkish border). Numbered selections grown by Dmitri Begetovski's father Alexi Nikolai Begetovski, from seed collected from two almonds at Nikita Botanic Garden in Ukraine (Nikitski-1 and Nikitski 2). Thought to be traditional Armenian cultivars when we collected cuttings.	very large fruit, thin shell	cultivated	Davis-QUAR
AM-2006-275	10/13/06	C	0	<i>Prunus</i>	<i>dulcis</i>	Beketovski x-x	40.09075	43.79885	1010	Ararat	Orchard of Mr. Robert Asatrian near village of Vanand (near Turkish border). Numbered selections grown by Dmitri Begetovski's father Alexi Nikolai Begetovski, from seed collected from two almonds at Nikita Botanic Garden in Ukraine (Nikitski-1 and Nikitski 2). Thought to be traditional Armenian cultivars when we collected cuttings.	rich flavor	cultivated	Davis-QUAR

Sample #	Collection Date	Seed Cutting	Herbarium Samples	Herbarium			Elev.			Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
				Genus	Species	Cultivar or Local Name	Latitude	Longitude	(m)					
AM-2006-276	10/13/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	Ghevondi	40.09075	43.79885	1010	Ararat	Traditional Armenian apricot variety growing in the orchard of Mr. Robert Asatrian near village of Vanand (near Turkish border).	white apricot, very late. Described in Armenian Fruits Volume 1.	cultivated	Davis-QUAR
AM-2006-277	10/13/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	Karmra Tush	40.09075	43.79885	1010	Ararat	Traditional Armenian apricot variety growing in the orchard of Mr. Robert Asatrian near village of Vanand (near Turkish border).	Orange apricot with red blush, described in Armenian Fruits Volume 1.	cultivated	Davis-QUAR
AM-2006-278	10/13/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	Khosroveni	40.09075	43.79885	1010	Ararat	Traditional Armenian apricot variety growing in the orchard of Mr. Robert Asatrian near village of Vanand (near Turkish border).	Large, round, yellow apricot with red blush, described in Armenian Fruits Volume 1.	cultivated	Davis-QUAR
AM-2006-279	10/13/06	C	0	<i>Morus</i>	<i>alba</i>	Seedless Armenian Mulberry	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	Seedless, black fruit, very productive. Used for making a medicinal jam (made with thickened juice and walnuts) useful against cough	cultivated	Davis
AM-2006-280	10/13/06	C	0	<i>Prunus</i>	<i>avium</i>	Volovye Sertse (= Bull's Heart)	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	large, very red, very sweet, cherry.	cultivated	Davis-QUAR
AM-2006-281	10/13/06	C	0	<i>Prunus</i>	<i>avium</i>	Podarok Armenii (Russian for 'Gift of Armenia')	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	Yellow and red fruit.	cultivated	Davis-QUAR
AM-2006-282	10/13/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	Nakhijevani	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	Orange with a red cheek.	cultivated	Davis-QUAR
AM-2006-283	10/13/06	C	0	<i>Prunus</i>	<i>armeniaca</i>	Amban	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	White apricot, similar to Ghevondi but different flavor.	cultivated	Davis-QUAR
AM-2006-284	10/13/06	C	0	<i>Juglans</i>	<i>regia</i>	Local Walnut Selection	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	Best of 6 walnut seedlings growing in this garden. Described as a long, oily nut.	cultivated of wild origin	Davis
AM-2006-285	10/13/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	Chartar Gyugh	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	Lumpy, semi-pyriform, medium sweet, hard, late. Not yet ripe in mid-October. Can be stored until spring. From Nogorno Karabagh.	cultivated	Corvallis-QUAR
AM-2006-286	10/13/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	Alena	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	New release from the Institute, pear shape, sweet, larger than Arakseni.	cultivated	Corvallis-QUAR
AM-2006-287	10/13/06	C	0	<i>Cydonia</i>	<i>oblonga</i>	Arakseni	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	Medium size (~350 g), apple shaped Sweet Quince.	cultivated	Corvallis-QUAR
AM-2006-288	10/13/06	C	0	<i>Ficus</i>	<i>carica</i>	Yerevan Fig	40.18462	44.43504	955	Ararat	Personal garden of Dr. Vagharshak Hayrapetyan, head of the Scientific Center for Viticulture, Fruit Growing and Winemaking on the outskirts of Yerevan.	From Nogorno Karabagh. Medium, purple and green fig, sweet, rich, red pulp; flattened shape.	cultivated	Davis
AM-2006-289	10/14/06	S	0	<i>Humulus</i>	<i>lupulus</i>	Wild Hop	40.11087	44.73418	1300	Ararat	Garni. Along the Azat River in the Avan Canyon deep below the Garni Temple.	Weedy, wild hop growing along side of road over fences and brush across from river.	wild	Armenia Genebank
AM-2006-290	10/14/06	S	0	<i>Juglans</i>	<i>regia</i>	Walnut - market sample	40.17600	44.61300	1400	Ararat	roadside vendor enroute between Yerevan and Garni	Soft shell nuts, we were able to crack out by hand and eat in car.	cultivated	Davis
AM-2006-291	10/16/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Vazdaguyen Yerevani	40.07370	44.17877	856	Armavir	Cuttings from Gagik Melyan, Scientific Center for Viticulture, Fruit Growing and Winemaking, field station near village of Yerashkavan	Aboriginal pink, seedless variety, may be a clone of Thompson but berries are smaller.	cultivated	Davis-QUAR
AM-2006-292	10/16/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Garan Dmak (= Sheep's Head)	40.07370	44.17877	856	Armavir	Cuttings from Gagik Melyan, Scientific Center for Viticulture, Fruit Growing and Winemaking, field station near village of Yerashkavan	One of most important and oldest Armenian grapes. White, used only for wine.	cultivated	Davis-QUAR
AM-2006-293	10/16/06	C	0	<i>Vitis</i>	<i>vinifera</i>	Karmir Kechani (= red hanger)	40.07370	44.17877	856	Armavir	Cuttings from Gagik Melyan, Scientific Center for Viticulture, Fruit Growing and Winemaking, field station near village of Yerashkavan	Table variety, female only, with red-pink, large fruit. Is hung for use during the winter, thus the name.	cultivated	Davis-QUAR



Sample #	Collection Date	Seed Cutting	Herbarium Samples	Herbarium			Elev.			Province	Source/Locality/Habitat	Plant/Fruit Notes	Origin	Recipients
				Genus	Species	Cultivar or Local Name	Latitude	Longitude	(m)					
AM-2006-294	10/16/06	C	0	<i>Vitis</i>	<i>vinifera</i>	<b>Mskhali</b>	40.07370	44.17877	856	Armavir	Cuttings from Gagik Melyan, Scientific Center for Viticulture, Fruit Growing and Winemaking, field station near village of Yeraskhavan	Table and wine grape, white, one of oldest Armenian varieties, is most important for Cognac.	cultivated	Davis-QUAR
AM-2006-295	10/16/06	C	0	<i>Vitis</i>	<i>vinifera</i>	<b>Shaumyani (Shahumyani)</b>	40.07370	44.17877	856	Armavir	Cuttings from Gagik Melyan, Scientific Center for Viticulture, Fruit Growing and Winemaking, field station near village of Yeraskhavan	Elongate table grape from open pollinated Itsaptuk, an old aboriginal variety. This selection was produced in 1950s and is one of most popular table grapes.	cultivated	Davis-QUAR
AM-2006-296	10/16/06	C	0	<i>Vitis</i>	<i>vinifera</i>	<b>Voskehat (= Golden Fruit)</b>	40.07370	44.17877	856	Armavir	Cuttings from Gagik Melyan, Scientific Center for Viticulture, Fruit Growing and Winemaking, field station near village of Yeraskhavan	White grape, gives high quality wine, low yield, vulnerable to fungal diseases. One of the oldest Armenian grapes, thought to be the grape brought on the Ark by Noah and still growing in region near Mount Ararat.	cultivated	Davis-QUAR
AM-2006-297	10/16/06	C	0	<i>Vitis</i>	<i>hybrid</i>	<b>Charentsis</b>	40.07370	44.17877	856	Armavir	Cuttings from Gagik Melyan, Scientific Center for Viticulture, Fruit Growing and Winemaking, field station near village of Yeraskhavan	A hybrid between <i>V. vinifera</i> x ( <i>V. vinifera</i> x ( <i>V. vinifera</i> x <i>V. amurensis</i> )). A tenturier, withstands -25C, said to make a red wine similar to <i>vinifera</i> Berries we tried were <i>vinifera</i> -like with a slight hybrid note.	cultivated	Davis-QUAR
AM-2006-298	10/16/06	C	0	<i>Vitis</i>	<i>vinifera</i>	<b>Banants</b>	41.00032	45.23353	534	Tavush	Cuttings from Gagik Melyan, Scientific Center for Viticulture, Fruit Growing and Winemaking, field station near Idjevan	Named for an Armenian village, now in Azerbaijan territory. A red wine grape, one of the	cultivated	Davis-QUAR
AM-2006-299	10/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	<b>Areni (true Areni)</b>	39.72010	45.17980	1400	Vayots Dzor	Vineyard in Areni	Traditional 'Areni'	cultivated	Davis-QUAR
AM-2006-300	10/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	<b>Areni Tozot</b>	39.72010	45.17980	1400	Vayots Dzor	Vineyard in Areni	Leaves are similar to Areni and is considered a clone by some, but not by Gagik Melyan. Clusters are more compact than standard Areni and much higher yielding. Some winemakers consider this to be unacceptable in "Areni" wines, while others consider it one of the best.	cultivated	Davis-QUAR
AM-2006-301	10/19/06	C	0	<i>Vitis</i>	<i>vinifera</i>	<b>Voskehat (= Golden Fruit) - Resistant Clone</b>	39.72010	45.17980	1400	Vayots Dzor	Vineyard in Areni	Much more disease resistant than standard Voskehat, believed to be a true clone. Collected near Areni.	cultivated	Davis-QUAR