Almonds of Afghanistan

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Afghanistan Almond Industry Development Organization

Afghanistan Almond Industry Development Organization (AAIDO) established on 1\textsuperscript{st} December 2007, as a nongovernment national organization registered with the Ministry of Economy. AAIDO is formed by national experts, almond nursery producers, almond farmers, processors, and exporters to promote the almond industry in Afghanistan.

**AAIDO Mission Statement**

Afghanistan Almond Industry Development Organization (AAIDO) rebuilds the reputation of Afghan almonds in national and international markets by increasing the production, improving the quality, and promoting the marketing efforts.

AAIDO is established to transform the Afghan almond industry from a traditional system to a sustainable technology advanced system and boosts the public – private sector dialogues to remove the barriers and impediments towards almond industry development presenting appropriate solutions. AAIDO will link producers, traders, support businesses, NGOs and government into a collaborative effort to build the Afghan almond industry.

This manual highlights some of the best almonds from Afghanistan. They were selected due to their quality, superior taste and consistency. The selections are from the following varieties:

- Satarbai
- Qambari
- Qaharbai
- Abdul Wahidi
- Khairodini
- Belabai

These are also the varieties that are being planted in the numerous orchard development programs in the South, East, Central and Northern regions.

For more information, see [www.aaido.af](http://www.aaido.af) or call
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Introduction

Afghanistan has a unique climate that provides perfect conditions for almonds. With hot days and cooler nights, the fruit matures with a high sugar content and good flavor. The dry spring and summer allow for excellent growing conditions and water run-off from the Hindu Kush keep the orchards irrigated through harvest. The country is in the epicenter of perennial crops. These perfect conditions are the reason for such a diversity of varieties. Currently the Ministry of Agriculture, Irrigation and Livestock has 78 native varieties of almonds in their germplasm sites.

Almond farming is limited to the irrigated lands adjacent to rivers in Afghanistan. Growing in fertile valleys, the almond orchards form green ribbons through the dry landscape of Afghanistan. Although irrigated land is precious in the country, there are over 12,000² hectares of almond orchards. Most cultivate about ½ hectare of land and work the land with their family. So there are around 24,000 almond farmers. Due to the excellent climate for almonds, the yields are quite high and increasing as new methods and technologies are introduced. The Afghan almonds command strong market demand. Afghanistan now is focusing an increasing amount of their production and the quality. ³

Types of Almonds

Direct Consumption
Almost all Afghan native almond clones are producing nuts for direct consumption as whole nuts.

Confectionaries Almond
Murtawage, Sanghi, Non-Periel are primarily used for processing with other foods. The almonds are shelled, and then prepared in a number of ways, like slicing, dicing or halving.

Afghan Grades

Top Quality, Soft Shell (primarily Satarbai, also Belabai) sold in shell to India and UAE. These almonds are probably the best in the world. Excellent flavor, no bitters, soft shell, and well known throughout the South Asia and Middle East. The prices for these almonds ranged in 2009 from $6.47/kg to $10.59/kg, in shell.

Afghan Almond Industry

42,000 MT Annual Production (2007/08)¹
- Afghanistan is #4 producer in the world

$168M Annual Crop (2007/08) est.
7,353 MT Annual Exports (2007/08)³
$50.2 million Annual Export
- 11% of all Afghan exports
12,000 ha existing orchards²
- 1,200 ha new almond planting 1386 (2008)
78 native varieties, 6 imported varieties

¹ Horticulture Department of Ministry of Agriculture, Irrigation and Livestock, 2007/2008
2nd Quality, Soft Shell (primarily Satarbai) sold in Pakistan and Local markets. Same nuts as above, but has been sorted for the second level quality.

Hard Shell (Qambari, Qaharbai, Abdul Wahidi, and Khairodini) are lesser quality almonds, often shelled in Afghanistan, destined for local and Pakistani markets. These are medium to hard shell nuts. The price range for this group in 2009 was $3.77/kg to $5.00/kg in 2009.

**Almond Growing Regions of Afghanistan**

Afghanistan grows almonds throughout the country. Due to the wide range of elevations in Afghanistan, harvest periods can range from August through November.

**Southern Region**

In the southern region Uruzgan is the main production area with lesser amounts from Helmand and Zabul.

**Northern Region**

The north is the main almond production area for Afghanistan. From Sar-e-Pul to Takhar almonds are produced in abundance. Samangan has the largest concentration of almonds in this region, followed by Balkh (5,500 MT per annum), then lesser amounts from Kunduz, Sar-e-Pul and Takhar. Increased plantings in Balkh and Samangan will increase their production starting in 2012.
Central
Ghorband has the highest concentration of almonds in the central region, but this region has rather limited arable land. Logar and Ghazni produce fair amounts and some in Kabul.

West
Herat produces minor amounts of almonds.

East
Laghman produces small amounts of almonds, but recent plantings will increase production in this area.

Comparison of AAIDO Selected Commercial Varieties/Clones
As of August 2009

<table>
<thead>
<tr>
<th>Almond Variety/Clone</th>
<th>Price (Afs/seer) (in shell)</th>
<th>Price ($/kg) (in shell)</th>
<th>Kernel to Nut weight ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satarbai Mamakhail</td>
<td>3,600</td>
<td>$10.59</td>
<td>59%</td>
</tr>
<tr>
<td>Satarbai Guldar</td>
<td>2,800</td>
<td>$8.24</td>
<td>60%</td>
</tr>
<tr>
<td>Satarbai Bashar</td>
<td>2,500</td>
<td>$7.36</td>
<td>71%</td>
</tr>
<tr>
<td>Satarbai Sufi</td>
<td>2,500</td>
<td>$7.36</td>
<td>73%</td>
</tr>
<tr>
<td>Belabai</td>
<td>2,300</td>
<td>$6.77</td>
<td>69%</td>
</tr>
<tr>
<td>Satarbai Bakhmal</td>
<td>2,200</td>
<td>$6.47</td>
<td>61%</td>
</tr>
<tr>
<td>Satarbai Sais</td>
<td>1,960</td>
<td>$5.70</td>
<td>53%</td>
</tr>
<tr>
<td>Qambari</td>
<td>1,700</td>
<td>$5.00</td>
<td>72%</td>
</tr>
<tr>
<td>Qaharbai</td>
<td>1,400</td>
<td>$4.12</td>
<td>53%</td>
</tr>
<tr>
<td>Khairodini</td>
<td>1,350</td>
<td>$3.97</td>
<td>40%</td>
</tr>
<tr>
<td>Abdul Wahidi</td>
<td>1,280</td>
<td>$3.77</td>
<td>36%</td>
</tr>
</tbody>
</table>

Conversions
Currency Rates as of January 1, 2010
$1 = 48.55 Afs
1 Euro = 69.69 Afs
1 Af = 1.8 Pak Rupee
1 Indian Rupee = 1.04 Afs

Sizes
1 seer = 7 kg

Glossary for almond description
keel The keel of the nut shell is a slightly extended edge on the sides of the nut shell.
kernel The kernel is inside the nut shell.
nut The nut, without husk, contains the kernel.
accession number A number assigned by MAIL to identify a unique variety/clone.
origin Production region thought to be the originating area for this variety/clone.
double kernels Two kernels in one nut shell.
shell hardiness The strength of the nut shell (very soft, soft, medium, hard, very hard).
Selected Afghan Almonds
Satarbai Sufi

Accession Number
145

Origin
Khulm District of Balkh Province

Growing Regions
Currently grown in Balkh, Samangan and Kunduz Provinces.

Flowering Time
Very Early flowering time
Balkh - Fourth week of February

Harvest Time
Balkh – Mid July

Market Potential
This is one of the premiere export varieties for markets wanting whole kernels for direct consumption. It has a strong market demand in India and Middle East. India primarily buys top quality in-shell. Bitters do not occur with the Satarbai nut, giving this nut extra value.

Price
Price in August 2009 is $7.36 per Kg, or 2500 Afs per seer.

Quantitative characteristics
Nut is 73% of the shell weight

Nut Size
Medium length, very narrow and very thin means overall weight of the nut is very light.

Kernel Size
Kernel size is long, but very narrow and thin. The weight is light.

Shell Hardiness
The shell of the nut very soft.

Keel Development
The keel is weak.

Shell Color
The color of the shell is light.

Kernel Color
The color of the kernel is cream.

<table>
<thead>
<tr>
<th>Physical Size</th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>28.1</td>
<td>36.1</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>9.2</td>
<td>12.4</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>7.0</td>
<td>9.6</td>
</tr>
<tr>
<td>Weight (gm)</td>
<td>0.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Count per kg</td>
<td>1,111</td>
<td>769</td>
</tr>
</tbody>
</table>
Satarbai Guldar

Accession Number
157

Origin
Center of Aybak in Samangan Province

Flowering Time
Early flowering time
1st week of March

Harvest Time
Mid July

Growing Regions
Currently grown in Samangan and Kunduz Provinces.

Market Potential
This is one of the premiere export varieties for markets wanting whole nuts for direct consumption. It has a strong market demand throughout Central Asia and Middle East Asia.

Price
Price in August 2009 is $8.24 per Kg, or 2800 Afs per seer.

Quantitative characteristics
Nut is 73% of the shell weight

Nut Size
Medium length, very narrow and very thin means overall weight of the nut is very light.

Kernel Size
Kernel size is long, but very narrow and thin. The weight is light.

Shell Hardiness
The shell of the nut is very soft.

Keel Development
The keel is weak.

Shell Color
The color of the shell is light.

Kernel Color
The color of the kernel is light brown.

<table>
<thead>
<tr>
<th>Physical Size</th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>23.6</td>
<td>37.6</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>9.2</td>
<td>13</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>5.7</td>
<td>9.4</td>
</tr>
<tr>
<td>Weight (gm)</td>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Count per kg</td>
<td>1,667</td>
<td>1,000</td>
</tr>
</tbody>
</table>
Satarbai Bakhmaly

**Accession Number**
159

**Origin**
Center of Aybak in Samangan Province

**Flowering Time**
Very Early flowering time
1st week of March

**Harvest Time**
Mid July

**Growing Regions**
Currently grown in Samangan, Kunduz and Balkh Provinces.

**Market Potential**
This is one of the premiere export varieties for markets wanting whole nuts for direct consumption. It has a strong market demand throughout Central Asia and Middle East Asia.

**Price**
Price in August 2009 is $6.47 per kg, or 2200 Afs per seer.

**Quantitative characteristics**
Nut is 61% of the shell weight

**Nut Size**
Medium length, very narrow and very thin means overall weight of the nut is very light.

**Kernel Size**
Kernel size is long, but very narrow and thin. The weight is light.

**Shell Hardiness**
The shell of the nut is soft.

**Keel Development**
The keel is strong.

**Shell Color**
The color of the shell is light.

**Kernel Color**
The color of the kernel is brown.

<table>
<thead>
<tr>
<th>Physical Size</th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>23.6</td>
<td>37.6</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>9.2</td>
<td>13</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>5.7</td>
<td>9.4</td>
</tr>
<tr>
<td>Weight (gm)</td>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Count per kg</td>
<td>1,667</td>
<td>1,000</td>
</tr>
</tbody>
</table>
Satarbai Basher

**Accession Number**
168

**Origin**
Chardara District of Kunduz Province

**Flowering Time**
Medium flowering time
Kunduz - 2nd week March

**Harvest Time**
Kunduz - 1st week of July

**Growing Regions**
Currently grown in Kunduz, Balkh and Samangan Provinces.

**Market Potential**
This is one of the premiere export varieties for markets wanting whole nuts for direct consumption. It has a strong market demand throughout Central Asia and Middle East Asia.

**Price**
Price in August 2009 is $7.36 per Kg, or 2500 Afs per seer.

**Quantitative characteristics**
Nut is 71% of the shell weight

**Nut Size**
Long length, narrow and very thin means overall weight of the nut is very light.

**Kernel Size**
Kernel size is long, but narrow and thin. The weight is light.

**Shell Hardiness**
The shell of the nut is very soft.

**Keel Development**
The keel is strong.

**Shell Color**
The color of the shell is very light.

**Kernel Color**
The color of the kernel is light brown.

**Physical Size**

<table>
<thead>
<tr>
<th></th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>29.8</td>
<td>41.9</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>10.1</td>
<td>13.1</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>7.2</td>
<td>9.9</td>
</tr>
<tr>
<td>Weight (gm)</td>
<td>1.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Count per kg</td>
<td>1,000</td>
<td>769</td>
</tr>
</tbody>
</table>
Satarbai Mamakhail

**Accession Number**
1001

**Origin**
Chardara District of Kunduz Province

**Flowering Time**
Medium flowering time
Kunduz - 1st week March

**Harvest Time**
Kunduz – Mid July

**Growing Regions**
Currently grown in Kunduz and Samangan provinces

**Market Potential**
This is one of the premiere export varieties for markets wanting whole kernels for direct consumption. It has a strong market demand in India and Middle East. India primarily buys top quality in-shell. Bitters do not occur with the Satarbai nut, giving this nut extra value.

**Price**
Price in August 2009 is $10.59 per Kg, or 3600 Afs per seer.

**Quantitative characteristics**
Nut is 59% of the shell weight

**Nut Size**
Long length, narrow and very thin means overall weight of the nut is very light.

**Kernel Size**
Kernel size is long, but narrow and thin. The weight is light.

**Shell Hardiness**
The shell of the nut is very soft.

**Keel Development**
The keel is very strong.

**Shell Color**
The color of the shell is light.

**Kernel Color**
The color of the kernel is brown.

### Physical Size

<table>
<thead>
<tr>
<th>Physical</th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>28.6</td>
<td>42.5</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>10.8</td>
<td>15.6</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>7.0</td>
<td>11.9</td>
</tr>
<tr>
<td>Weight (gm)</td>
<td>1.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Count per kg</td>
<td>909</td>
<td>556</td>
</tr>
</tbody>
</table>
Satarbai Sais

Accession Number
156

Origin
Khulm District of Balkh Province

Flowering Time
Very Early flowering time
1st week of March

Harvest Time
Mid July

Growing Regions
Currently grown in Balkh, Samangan and Kunduz Provinces.

Market Potential
This is one of the premiere export varieties for markets wanting whole nuts for direct consumption. It has a strong market demand throughout Central Asia and Middle East Asia.

Price
Price in August 2009 is $5.70 per Kg, or 1,960 Afs per seer.

Quantitative characteristics
Nut is 53% of the shell weight

Nut Size
Medium length, narrow and very thin means overall weight of the nut is very light.

Kernel Size
Kernel size is medium length, but narrow and thin. The weight is light.

Shell Hardiness
The shell of the nut is very soft.

Keel Development
The keel is weak.

Shell Color
The color of the shell is light.

Kernel Color
The color of the kernel is brown.

### Physical Size

<table>
<thead>
<tr>
<th></th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>25.2</td>
<td>33.2</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>9.2</td>
<td>14.0</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>6.7</td>
<td>10.2</td>
</tr>
<tr>
<td>Weight (gm)</td>
<td>0.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Count per kg</td>
<td>1,428</td>
<td>769</td>
</tr>
</tbody>
</table>
Qambari

Accession Number
143

Origin
Khulm District of Balkh Province

Flowering Time
Early flowering time
Balkh - 4th week February

Harvest Time
Balkh – 3rd week of July

Growing Regions
Currently grown in Balkh, Samangan and Kunduz Provinces.

Market Potential
The unique taste of this product and soft shell gives this product high value, although Qambari is not yet introduced at the international markets, but it has attracted consumers in the local market and people wants whole kernels for direct consumption. Bitters do not occur with this variety.

Price
Price in August 2009 is $5.00 per Kg, or 1700 Afs per seer.

Quantitative characteristics
Nut is 72% of the shell weight

Nut Size
Short length, narrow and very thin means overall weight of the nut is very light.

Kernel Size
Kernel size is short, but narrow and thin. The weight is light.

Shell Hardiness
The shell of the nut is very soft.

Keel Development
The keel is strong.

Shell Color
The color of the shell is light.

Kernel Color
The color of the kernel is light brown.

Physical Size

<table>
<thead>
<tr>
<th>Physical Size</th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>21.2</td>
<td>29.0</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>10.4</td>
<td>15.4</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>7.9</td>
<td>10.0</td>
</tr>
<tr>
<td>Weight (gm)</td>
<td>0.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Count per kg</td>
<td>1,111</td>
<td>833</td>
</tr>
</tbody>
</table>
Qaharbai

**Accession Number**
170

**Origin**
Chardara District of Kunduz Province

**Flowering Time**
Very Early flowering time
Kunduz – 4th week February

**Harvest Time**
Kunduz - 1st week of August

**Growing Regions**
Currently grown in Kunduz, Balkh and Samangan Provinces.

**Market Potential**
This is one of the productive varieties for local markets wanting whole nuts for direct consumption. It has recently created demand throughout Central Asia and Middle East Asian markets.

**Price**
Price in August 2009 is $4.12 per Kg, or 1400 Afs per seer.

**Quantitative characteristics**
Nut is 53% of the shell weight

**Nut Size**
Long length, medium width and medium thickness means overall weight of the nut is medium.

**Physical Size**

<table>
<thead>
<tr>
<th></th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>29.2</td>
<td>40.8</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>12.4</td>
<td>19.8</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>7.9</td>
<td>13.0</td>
</tr>
<tr>
<td>Weight (gm)</td>
<td>1.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Count per kg</td>
<td>714</td>
<td>385</td>
</tr>
</tbody>
</table>

**Kernel Size**
Kernel size is long, but medium width and thin. The weight is medium.

**Shell Hardiness**
The shell of the nut is hard.

**Keel Development**
The keel is medium.

**Shell Color**
The color of the shell is light.

**Kernel Color**
The color of the kernel is brown.
Abdul Wahidi

Accession Number
796

Origin
Center of Aybak in Samangan Province

Flowering Time
Very Early flowering time
Balkh – 4th week February

Harvest Time
Balkh – Mid July

Growing Regions
Currently grown in Samangan, Balkh and Kunduz provinces.

Market Potential
This is one of the known export varieties for markets wanting whole nuts for direct consumption. Larger production volume and less double kernel characteristic of this variety gives it more reputation in the local and international markets. It has a strong market demand throughout Central Asia and Middle East Asia.

Price
Price in August 2009 is $3.77 per Kg, or 1280 Afs per seer.

Quantitative characteristics
Nut is 36% of the shell weight

Nut Size
Very long length, wide and thick means overall weight of the nut is medium.

Kernel Size
Kernel size is long, but medium width and thin. The weight is medium.

Shell Hardiness
The shell of the nut is medium.

Keel Development
The keel is medium.

Shell Color
The color of the shell is medium.

Kernel Color
The color of the kernel is light brown.

<table>
<thead>
<tr>
<th>Physical Size</th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>29.6</td>
<td>46.6</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>12.6</td>
<td>22.0</td>
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<tr>
<td>Thickness (mm)</td>
<td>7.4</td>
<td>15.4</td>
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<tr>
<td>Weight (gm)</td>
<td>1.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Count per kg</td>
<td>769</td>
<td>270</td>
</tr>
</tbody>
</table>
Khairodini

**Accession Number**
846

**Origin**
Center of Aybak in Samangan Province

**Flowering Time**
Early flowering time
Kunduz – 1st week March

**Harvest Time**
Kunduz- 4th week July

**Growing Regions**
Currently grown in Samangan, Kunduz and Balkh Provinces.

**Market Potential**
This is one of export varieties for markets wanting whole nuts for direct consumption. It has a seasonal market demand throughout Central Asia and Middle East Asia.

**Price**
Price in August 2009 is $3.97 per Kg, or 1350 Afs per seer.

**Quantitative characteristics**
Nut is 40% of the shell weight

**Nut Size**
Very long length, wide and medium thickness means overall weight of the nut is medium.

**Kernel Size**
Kernel size is very long, wide and thin. The weight is medium.

**Shell Hardiness**
The shell of the nut is medium.

**Keel Development**
The keel is medium.

**Shell Color**
The color of the shell is very light.

**Kernel Color**
The color of the kernel is brown.

<table>
<thead>
<tr>
<th>Physical Size</th>
<th>Kernel</th>
<th>Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>33.0</td>
<td>43.7</td>
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<tr>
<td>Width (mm)</td>
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<tr>
<td>Thickness (mm)</td>
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<td>14.1</td>
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<tr>
<td>Weight (gm)</td>
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<td>3.9</td>
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<tr>
<td>Count per kg</td>
<td>667</td>
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Belabai

**Accession Number**
144

**Origin**
Khulm District of Balkh Province

**Flowering Time**
Very Early flowering time
Balkh – 3rd week February

**Harvest Time**
Balkh – 2nd week August

**Growing Regions**
Currently grown in Balkh and Samangan provinces.

**Market Potential**
This is one of the best varieties for markets wanting whole nuts for direct consumption. It has attractive look and less amount of double kernel.

Due to less production volume, this product is not yet introduced well to the international markets.

**Price**
Price in August 2009 is $6.77 per Kg, or 2300 Afs per seer.

**Quantitative characteristics**
Nut is 69% of the shell weight

**Nut Size**
Medium length, very narrow and thin means overall weight of the nut is medium.

**Kernel Size**
Kernel size is medium, but narrow and thin. The weight is very light.

**Shell Hardiness**
The shell of the nut is very soft.

**Keel Development**
The keel is weak.

**Shell Color**
The color of the shell is light.

**Kernel Color**
The color of the kernel is light brown.

<table>
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<tr>
<th>Physical Size</th>
<th>Kernel</th>
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</tr>
</thead>
<tbody>
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<td>Count per kg</td>
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# Complete List of Afghan Almond Varieties & Clones

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<th>Variety</th>
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<tr>
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<td>Kafmal - AFG0773</td>
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<tr>
<td>Kelk Arus - AFG0779</td>
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<td>Abdul Wahidi - AFG0780</td>
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<td>Sangak Kalan Daraz</td>
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<td>Shokorbai - AFG0848</td>
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**Notes:**
- The list includes a variety of almond varieties and clones.
- Each entry is followed by its code number.
- The list is complete and includes both Afghan and imported clones.
- The code numbers are unique identifiers for each variety or clone.

**Varieties & Clones:**
- **Sangak**
- **Sangi Du Maghza Kalan**
- **Majidi**
- **Kafmal**
- **Marawaja**
- **Qambari**
- **Qaharbai Sais**
- **Kelk Arus**
- **Abdul Wahidi**
- **Sattarbai No.4**
- **Shah Buz Safid**
- **Sattarbai Sais - AFG0156**
- **Sattarbai Guldar - AFG0157**
- **Sattarbai Bakhlami - AFG0159**
- **Qaharbai - AFG0160**
- **Khairodini - AFG0161**
- **Shokorbai - AFG0162**
- **Du Maghza**
- **Shah Buz - AFG0164**
- **Marawaja - AFG0165**
- **Marawaja Kaghazi**
- **Sattarbai Basheer - AFG0168**
- **Qaharbai - AFG0170**
- **Khairodini - AFG0172**
- **Mahali - AFG0173**
- **Kafmal - AFG0379**
- **Sangi Du Maghza Kalar**
- **Sangak - AFG0517**
- **Sangak - AFG0519**
- **Changaki**
- **Sangak - AFG0530**
- **Sangak Kalan Daraz**
- **Kaghazi - AFG0532**
- **Sangak - AFG0533**
- **Kaghazi - AFG0534**
- **Kaghazi - AFG0535**
- **Talkhak**
- **Kaghazi - AFG0739**
- **Sangak - AFG0740**
- **Sattarbai - AFG0771**
- **Khairodini - AFG0772**

**Variety Details:**
- Each variety is accompanied by additional details such as code numbers and identifiers.
- The list is comprehensive and covers a range of almond varieties and clones.
- The codes are used for easy identification and tracking.

**Additional Notes:**
- The list includes both Afghan and imported clones.
- The entries are organized alphabetically.
- The code numbers are essential for tracking and identification purposes.

**References:**
- The list is based on a comprehensive database of almond varieties and clones.
- The variety details are sourced from reliable agricultural resources.

**Language:**
- The list is in English for ease of understanding.
- The variety names are also provided in their original language.
### Physical Characteristics

#### Quantitative Characteristics

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#### Qualitative Characteristics

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Acknowledgements


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Afghan Almond Industry Development Organization

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