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# Greece Planting Seeds Annual 2000

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# **Report Highlights:**

In 1999, Greece imported approximately \$ 85 million of seeds, of which \$ 18 million came from the United States. Traditional imports include seeds for cotton, corn, alfalfa, and fruits and vegetables but markets are also growing for wheat seed, bedding plants and ornamental grasses and plants. The U.S. annually ships about 8,000 mt of cotton seed, about 75% of total demand, and close to 3,000 mt of corn seed, which covers over 80% of the market. Both markets could be affected by EU/GOG decisions on the adventitious presence of biotech materials.

Includes PSD changes: No Includes Trade Matrix: No Annual Report Athens [GR1], GR

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# Section I: Situation and Outlook - Narrative

# **Production**

In 1999, the total value of the seed market at the farm level was \$140 million, with imports of approximately \$85 million, including \$18 million from the United States. Much of the imports were made up of seeds for production of cotton, corn, wheat, alfalfa, fresh tomatoes and tomatoes for canning, fresh consumption vegetables and grasses. While the demand for seeds for these traditional crops remains strong, new markets are expected to grow, especially for wheat seeds and seeds for bedding plants, ornamental grasses and floricultural products. As European Union (EU) regulations calling for farmers to use more certified seeds are implemented over time, the demand for imports of quality seeds from other countries can be expected to increase.

Most of domestic production of seed is controlled by quasi-government organizations. Tobacco seed is produced and distributed by the Tobacco Institute (part of the National Network of Institutes for Agricultural Research under the Ministry of Agriculture); sugar beet seed is produced and distributed by the Hellenic Sugar industry; and cotton produced by the Cotton Institute in cooperation with the Hellenic Cotton Board is distributed by KESPY (Central Cooperative Union for Supplying Agricultural Inputs). Some cotton seed (900-1000 MT annually) is produced by 2 private companies (i.e EFTHIMIADIS Co. & VETERIN).

The bulk of seeds used in Greece for field crops, vegetables, grasses and forage plants is imported from the EU, the United States and, to a lesser extent, from other third countries. Domestic production covers part of the local demand for some products such as tobacco, sugar beets, alfalfa, wheat, some cotton and corn. The Tobacco Institute of Greece (part of the National Agricultural Research network of Laboratories) produces and certifies and distributes all the tobacco seed needed by the farmers.

For cotton seed, domestic seed production was reduced dramatically after the SJ2 Acala varieties entered the Greek market in the 1980s. For the 2000 crop year, US cotton seed accounted for an estimated 73 percent of the market. Depending on import requirements and the treatment of adventitious presence of GMO seeds, the U.S share could continue to increase in the near future. Total seed use, however, will not increase since it is directly connected to the production quota of cotton set by the EU. Approximately 8,000 MT of cotton seed is imported from the US with another 2,500-3,000 MT of cotton seed imported from other origins and approximately 1,000-1,200 M.T produced domestically (mainly the SINDOS variety) which is produced by the Cotton Research Institute in Thessaloniki in cooperation with the Hellenic Cotton Board and a private firm. In 2000, growers paid between 1,300 - 2,200 Drs/Kg (\$3.38-5.73/Kg) to buy cotton seed for planting. This price is an 8 - 10% increase relative to 1999.

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Adventitious biotech material was discovered last spring in a small percentage of seed samples imported from the United States. Subsequently, the lint and seed from all plots where the level of GMO presence was suspected to be over 1% were to be segregated and kept out of the normal processing chain. (Some of the segregated cotton may be exported). Currently the Agricultural Ministry is discussing certification requirements for imports of cotton seed for the coming year in an effort to mitigate problems in the coming year.

The size of the corn seed market is 3,500 - 3,700 MT annually. Of this amount, 2,900 - 3,000 MT are of US origin (of which 58 percent are PIONEER hybrids) and 600 MT from other suppliers. In 2000, farmers paid 47,000 - 53,000 drs (\$122.40 - 138.00) per 75,000 seed kernels, with prices fluctuating according to variety. Both corn seed demand and prices have slightly increased since 1999.

Annual domestic production of durum wheat seed is estimated to be 25,000 - 30,000 MT out of a total demand of 125,000 - 130,000 MT and 48,000 MT of soft wheat seed. About 25% of durum wheat seed is imported (none from the US) and over 30 percent is non certified seed, kept from the previous seed harvest and re-planted. Farmers rotate the use of new wheat seed every 3 - 4 years which reduces the level of imports and sales of GOG certified seed produced domestically.

Domestic production of certain seeds is improving especially for sugar beet seed, tobacco seeds and alfalfa. Production of certified alfalfa seed is well established and has gradually replaced imported varieties due to its lower price. Currently only about 30 percent of the alfalfa seed needed is imported out of a total demand of about 1,200 MT annually (or 4,800 MT every 4 years). Prices for farmers have been stable for some time at approximately 650 -700 Drs./Kg (\$1.70 - 1.83) for the locally produced LAMIA variety, compared to approximately 3,000 Drs/Kg (\$7.80) for any imported alfalfa seed. Californian and French alfalfa seeds have lost ground in recent years and will continue to do so, even though they are qualitatively and genetically superior to those produced and certified domestically. Alfalfa is considered to be a profitable crop with acreage slowly increasing, particularly in the irrigated acreage left over from other crops or obtained from reclamation projects carried out by the Ministry of Agriculture. The total alfalfa crop acreage in 1999 is reported to be at 140,000 Ha corresponding to an output of 1,800,000 MT (dry matter basis) with a 6% increase in acreage estimated for 2000. The domestic animal feed market shows an increasing demand for dry alfalfa in pellets, which is offered at competitive prices compared to feed grains.

There are no seed production subsidies in effect.

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# **Plant health Regulations**

Greece follows the EU regulations concerning the implementation of phytosanitary procedures and registration of genetics in the EU catalog. The latest Greek law covering phytosanitary requirements is expected to be published within the next months in harmonization with the EU Regulation No.2204/1999. According to the Ministry of Agriculture, the situation regarding seed imports from the USA will change as Greece complies with the above Regulation, which amends EU Regulation No.2658/87. For some species, such as corn, cotton, or alfalfa, a phytosanitary certificate with an additional declaration is required, for other species (e.g. soybeans) a phytosanitary without any additional declaration is required (see below). For some species, the seeds can be imported without any phytosanitary certificate. The phytosanitary regulations remain the same regardless of the quantity of the imported seeds.

Specific regulations for each major field crop and open field vegetables are summarized below:

# **ALFALFA**

1. Official declaration that:

No symptoms from *Ditylenchus Dispaci*(Kuhn) Filipjev were observed at the growing field from the beginning of the last complete vegetative period and after a laboratory test a representative sample was found free from Ditylenchus Dispaci (Kuhn) Filipjev.

or;

Before exports the seeds were fumigated. b.

2.Official declaration that:

It is not known the presence of Clavibacter michiganensis spp.insidiosum Davis et.al at the growing field for the last ten years,

or;

the crop belongs to a variety that is recognized as resistant to Clavibacter michiganensis spp. insidiosum c. Davis et al..

or:

the fourth complete vegetative period from sowing has not started yet when the seeds were harvested and only one harvest took place from this crop,

or,

the content in inert matters, determined according to the rules applied for the certification of the seeds commercialized in the EU is less than 0.1 %.

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d. No symptoms of *Clavibacter michiganensis spp. insidiosum* Davis et al. were observed at the growing field during the last complete vegetative period, or, during the last two complete vegetative periods.

e. The crops grow on a field on which for the last three years before sowing the previous crop was not alfalfa.

# CANOLA

A phytosanitary certificate is not required.

# **CARROT**

A phytosanitary certificate is not required.

# **CORN**

A phytosanitary certificate with additional declaration is required along with an additional declaration that:

- a. The seeds are coming from area recognized as free from Erwinia stewartii (Smith) Dye.
- b. A representative sample was examined in a laboratory and found free from *Erwinia stewartii* (Smith) Dye.

# **COTTON**

A phytosanitary certificate with the following additional declaration is required:

- a. The seeds are acid delinted, and,
- b. No symptoms from *Glomerella gossypii* Edgerton were observed from the beginning of the last complete growing period at the production field, and that a representative sample was examined and found free from *Glomerella gossypii* Edgerton

Certification relating to GMO content is likely to be required for the 2001 planting season.

#### FLAX

A phytosanitary certificate is not required.

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### **MELON**

A phytosanitary certificate is not required.

### **MILLET**

A phytosanitary certificate is not required.

# **OATS**

A phytosanitary certificate is not required.

# **ONION**

A phytosanitary certificate without any additional declaration is required.

# **PEPPERS**

A phytosanitary certificate with the following additional declaration is required.

- 1. The seeds have received the appropriate treatment with acids, or, with other equivalent method as approved by the procedure mentioned in article 16 of directive 77/93 EEC.
- 2. a. The seeds are originated from areas where it is known that *Corynebacterium michiganense*, *Xanthomonas campestris p.v vesicatoria*, *or*, *Potato Spindle Tuber Viroid* have not appeared,

or,

- b. No symptoms from diseases caused by these pathogens were observed on the production area from the beginning of the last complete vegetative period.
- c. The seeds were tested in official tests at least for the above pathogens based on representative samples and according to appropriate methods and during these tests the seeds were found to be free from these pathogens.

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# **RICE**

A phytosanitary certificate with the following official statement is required.

a. The seeds were officially tested according to the appropriate nematological tests and found free from *Aphelenchoides besseyi* Christie.,

Or.

b. The seeds were submitted to the appropriate treatment with hot water or to another appropriate treatment against *Aphelenchoides besseyi* Christie.

# **SORGHUM**

A phytosanitary certificate is not required.

# **SOYBEANS**

A phytosanitary certificate without any additional declaration is required.

# **SQASH**

A phytosanitary certificate is not required.

# **SUNFLOWER**

A phytosanitary certificate with the following additional declaration is required.

- a. The seeds are originated from areas recognized as free from *Plasmopara halstedii* (Farlow) Berl et de Toni., or,
- b. The seeds, except those produced from varieties resistant to all races of *Plasmopara halstedii* (Farlow) Berl et de Toni present in the production area, were submitted to the appropriate treatment against *Plasmopara halstedii* (Farlow) Berl et de Toni.

# **TOMATOES**

A phytosanitary certificate with the following additional declaration is required.

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1. The seeds have received the appropriate treatment with acids, or, with other equivalent method as approved by the procedure mentioned in article 16 of directive 77/93 EEC.

2. a. The seeds are originated from areas where it is known that Corynebacterium michiganense, Xanthomonas campestris p.v. vesicatoria, or, Potato Spindle Tuber Viroid have not appeared,

or.

b. No symptoms from diseases caused by these pathogens were observed on the production area from the beginning of the last complete vegetative period

or,

c. The seeds were tested in official tests at least for the above pathogens based on representative samples and according to appropriate methods and during these tests the seeds were found to be free from these pathogens.

# WATERMELON

A phytosanitary certificate is not required.

# WHEAT

A phytosanitary certificate is required for "Karnal bunt" disease.

However, due to concerns over testing procedures for Karnal bunt, little is being imported from the United States.

# SEED TREATMENTS

Generally there are no restrictions on the import of seeds treated with a compound that is not registered or sold in Greece. However, it is prohibited to import seeds treated with mercury compounds.

#### GENERAL LIST OF PROHIBITED ORGANISMS

The EU Council Directive 92/103, annex I, part A, describes the "Harmful organisms whose introduction into, and whose spread within, all Member states shall be banned ". On the same EU Council directive, on annex II, are described the "Harmful organisms whose introduction into, and whose spread within, all Member states shall be banned if they are present on certain plants or plant products."

# REQUIRED SHIPPING DOCUMENTS

Greece requires for all commercial seed shipments the following documents:

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- 1. Commercial invoice
- 2. Bill of Lading
- 3. Certificate of origin
- 4. Phytosanitary certificate, upon species.
- 5.OECD certificate for each imported lot.

From the Greek side, importers must have an import permit which states the species, variety or hybrid, category of imported propagation material, country of origin, country of production and country of certification.

# **Seed Certification**

Planting seed handling, conditioning, and treatment equipment facilities are at a very advanced level in both the private and public sectors. For sugar beet seeds, tobacco seeds, some cotton seeds and cereal seed production, certification, packaging, and distribution are overseen by state organizations such as the Cotton Board, the Sugar Industry, the Tobacco Institute and the Cereal Institute as well as the Ministry of Agriculture. Agricultural cooperatives are also often involved in the distribution of the seed. The Tobacco Institute, the Sugar Industry and, to a certain extent, the Cereal Institute tightly control the production and distribution of seeds in the Greek market.

The Hellenic Sugar Industry produces its own seed, which covers domestic demand, and will provide certified seed directly to farmers who sign contracts with the beet processing plants. The same procedure takes place with tobacco seed, which is supplied to farmers by the Tobacco Institute, which has the authority to certify tobacco genetics. These organizations, together with KESPY Coop., control the use of seeds to ensure that certified seed is used in cooperation with Ministry of Agriculture local authorities (KEPYEL: certification centers).

Previously, Greek farmers mainly saved seed from the previous years' crop, particularly durum wheat seed, for planting. However, current EU regulation require farmers to begin using certified seed. As a result, most of the seeds for both field crops and vegetable crops used in Greece are certified, including a large proportion of wheat, barley and limited amounts of vegetable seeds. In 2000 - 2001 Greek farmers will be required to use 100 percent certified durum wheat seed. According to the EU regulations, after a certification system has been implemented farmers will only be eligible for the EU wheat area unit income support if they have used certified seeds listed either in the EU or national catalogs.

As the use of certified seed becomes more prevalent, private trade sources have noted that the state sector has begun showing an increased interest in developing and controlling a larger segment of the durum seed market.

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For durum wheat seeds of Mexa (in the EU catalog) and Mexicali - 81 (a Greek variety) there will be a market of approximately 140,000 MT by the year 2002. In addition to the use of certified seed in the durum market, there is a proposal to apply a similar system for soft wheat seed, however, nothing concrete has yet been developed.

In general, certification developments follow EU Regulations.

# **Intellectual Property Rights (Plant Variety Protection /Plant Patents and Variety Approval)**

Registration of any plant variety in the EU variety catalog ensures automatic acceptance of the seed and allows it to be imported and cultivated in Greece. EU registration is also effective for any Greek variety which is registered in the EU catalog. Foreign firms can apply through the GOG Ministry of Agriculture in order to place their genetics in the national catalog, which is also accepted by the EU. This procedure is time consuming and requires the submission of parent line genetics to the GOG Min.Ag. seed institutes and requires a period of two to four years of testing until final seed acceptance and registration into the National Catalog of Varieties. However, foreign companies can have new varieties listed in the EU catalog by registering them in other EU countries with simpler requirements. Greece is not a member of UPOV. Intellectual property rights are covered in the framework of EU Regulations No.2100/94.

# **Market Development Opportunities**

Greece has a significant potential for the marketing of foreign planting seeds. Already the largest portion of the Greek demand for seed is being met by imports from the U.S. and the EU. Field crop seeds being imported include corn hybrids, durum wheat seed, cotton seed, industrial tomato seed, potato seed, Indica type rice seeds, and small amounts of oilseeds. Vegetable seeds are also very important value wise, with greenhouse and/or open field tomato and cucumber seeds leading the demand, followed by melon, green beans and grass seeds.

For U.S. interests, corn and cotton hybrids, alfalfa and grass seeds, together with the main vegetable seed varieties, need further market development and promotion activities. Registration can be made either straight to the European catalog or indirectly through the national catalog of any EU member state. Most of the trade moves through private enterprises which represent firms in the U.S and E.U. Imports take place in compliance with EU regulations. Private firms have to receive an import permit from the GOG Ministry of Agriculture, Directorate for Plant Propagation Material and Fertilizers. Foreign firms which are not established, or do not have a distributor in Greece, must establish an office in Greece in order to obtain an import permit and to establish the required seed distribution around the farming regions.

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There are 14-15 large seed importing companies and distributors in Greece which represent 90 percent of the total sales value. Their success is based on one or two "key" hybrids, their relatively low prices, including large discounts and credit, and a relatively efficient distribution system.

For a seed company in Greece to be successful in the long term, it must have the following characteristics:

- Consistent high standards of seed quality.
- Strong technical support (assistance, promotion). Greek growers demand efficient technical support from the seed companies. They have been misled many times in the past and they easily become suspicious.
- Efficient commercial structure and wide distribution network
- Strong brand image
- Large range of reliable products

The Greek seed market has become very competitive over the last 10 years with several Greek companies representing 1 or more foreign seed sources. These Greek firms usually pack the seeds themselves. The imported seed has to be certified by the producing country of origin according to the EU rules.

There are approximately 2000 dealers/stores and 200 cooperatives throughout Greece that handle seeds as well as agrochemical products and fertilizers. The profit margin for seeds is between 28-45 percent for dealers and 15-25 percent for cooperatives. For the importers, the profit margin is 80-120 percent. About 95 percent of the growers purchase seeds from dealers, with the remaining 5 percent buying from cooperatives.

Industrial tomato seeds are supplied by the processing industries to the growers based on signed contracts. The number of contracts is determined by the production quota set by the EU for Greece. A similar procedure is followed for sugar beet seeds, tobacco seeds and for a portion of cotton seeds.

Many EU firms, mainly from Holland, France and Italy, are providing market development plans for their products, particularly for vegetable and grass seeds. This includes education and training of farmers, price incentives, technical assistance as well as research to adapt seeds to the local soil and micro climatic conditions. These activities are common practice based on contracts for exclusive handling and marketing of varieties hybrid. However, the market for the field crop seed market is still dominated by US firms.

# **Tariff Changes**

Tariff classification numbers and descriptions of seed products for planting are applied in compliance with the EU system (see Taric Reg. 2204/1999, 1278, pp.1005, 10/12/99).

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Seed importers are free to trade in accordance with the relevant EU regulations (phytosanitary and variety catalog requirements). From time to time, the Greek government imposes trade obstacles in an attempt to increase the demand for domestically produced seed (i.e. cotton seed in the recent past and corn hybrids in the 80s and early 90s). The justification for such non-tariff barriers are mainly phytosanitary.

# **TRADE**

### General

The market size for 1999 corn seed is estimated at 3,700 MT (of which 85 percent are purchased from the U.S.). This is expected to remain stable due to the reduction in the replacement of corn land by cotton. The main three categories of corn hybrids cultivated in Greece are of the short biological cycle with a FAO index of less than 500, the medium with 500-700 and long cycle with more than 700. The seed used in corn fields is estimated at 22 Kgs/ha.

The size of the cotton seed market is 12,000 MT (80 percent imported with a tendency to increase). The best quality of imported varieties is for Acala - SJ2. Most seed is purchased from the U.S. (83 percent of total imports) and smaller amounts from Spain and Israel.

Rice seed is used at a rate of 200 Kgs/ha and purchased mostly from Italy and Spain (Indica group varieties). There is a potential market for grass seed from the U.S., as well as vegetables where imports account for 96%, provided that U.S. products are competitive (main competitors are the Dutch, Germans and Danish). The main potential for vegetables is for various bean varieties (for fresh use) and various salad vegetable crops. The size of the market for grass seed is unknown and no reliable information exists to give an accurate picture of the Greek grass seed sector but the extensive public sector construction programs planned for the 2004 Olympic games are expected to create a demand for grass and other ornamental products.

Alfalfa seed demand is approximately 1,200 MT annually with about 30% imported from the U.S., France and Italy, and some times Turkey. Although imports have lost ground in the past few years due to the lower cost of the domestic seed, an emphasis on the higher quality may help regain some of the market.

Oilseed varieties are imported in limited amounts, particularly after the dramatic decline of soybean and sunflower crops in Greece. Sunflower seeds are purchased from Romania supplemented by the Greek variety Kavisos in order to satisfy plantings of approximately 10,000- 15,000/ha.

Most of the imported seed volume for field crops is for basic seed with only limited amounts of parent stock brought in for the use of seed improvement and production within Greece.

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# **Genetically Modified Organisms**

As reported in GR 9030, no field trials have been approved since 1998 for either cotton or corn GMO seeds to be grown in Greece. The GMO trials in 1998, however, did prove that the products can be beneficial to Greek farmers as being an alternative to serious insect damage.

In March 2000 cotton seed imported from the U.S., was found to contain adventitious biotech material. However, the seed had already been planted and/or distributed before the material had been discovered. As a result, the Ministry of Agriculture initially said that the affected crops would be uprooted. However, after further study, the Ministry decided that only about 500 hectares were affected at a level of above 1% GMO presence and that the resulting lint (approximately 1,800 tons) and seeds could be segregated and sold outside the normal processing chain. For the coming marketing period (2001 planting season) the Ministry of Agriculture is reviewing certification options to ensure that there are no similar problems in the future.

# **Trade Data**

No trade statistics are available by commodity for use in preparing a trade matrix.

# **Exchange Rates**

1998	\$1.00 U.S. = 294.30 Drachmas
1999	\$1.00 U.S. = 305.85 Drachmas
Jan. – Sept. 2000	\$1.00 U.S. = 356.36 Drachmas

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