

***New Phytosanitary
Regulations of Cotton
Lint Imports into Egypt***

Report No. 69

***Report of Consultancy by
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with the assistance of
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RDI Acronyms List

<i>ACRONYM</i>	<i>DESCRIPTION</i>
AC	Agricultural Census
ACDI	Agricultural Cooperative Development Institute
AERI	Agriculture Engineering Research Institute
AHD	Aswan High Dam
AIC	Agricultural and Irrigation Committee of the People's Assembly
ALCOTEXA	Alexandria Cotton Exporters Association
APRP	Agricultural Policy Reform Program
ARC	Agriculture Research Center
ATUT	Agricultural Technology Utilization & Transfer Program
AY	Agricultural Year Locator (October 1 st to September 30 th of the following year)
BOD	Board of Directors
CAGA	Central Administration for Governorates Affairs
CAPMAS	Central Agency for Public Mobilization & Statistics
CAPQ	Central Administration for Plant Quarantine, MALR
CASC	Central Administration for Seed Certification
CASP	Central Administration for Seed Production
CAWD	Central Administration for Water Distribution
CBE	Central Bank of Egypt
CIDA	Canadian International Development Agency
CIF	Cost, Freight and Insurance
CIPE	Center for International Private Enterprise
CMA	Capital Market Authority
Co.	Company
CODEX	Code of Food Standards developed by an international commission in 1962
COP	Chief of Party
CSPP	Egyptian-German Cotton Sector Promotion Program
CTS	Cargill Technical Services
DA	Development Associates, Inc.
DAI/B	Development Alternatives, Inc./Bethesda
DEPRA	Development Economic Policy Reform Analysis
EAO	Egyptian Agriculture Organization

<i>ACRONYM</i>	<i>DESCRIPTION</i>
EEA	Egyptian Exporters Association/ExpoLink
EEPC	Egyptian Export Promotion Center
ELS	Extra Long Staple Cotton
EMIPAC	Egyptian Marketing Agricultural Company
ERSAP	Economic Reform and Structural Adjustment Program
ESAS	Egyptian Seed Association
ESAs	Employee Shareholder's Association
ESOPs	Employees Stock Ownership Program
EU	European Union
FAO	Food and Agricultural Organization of the United Nations
FDIs	Foreign Direct Investments
Fed.	Feddan = 4200 square meter
FIHC	Food Industries Holding company
FOB	Free on Board
FSR	Food Security Research Unit
FY	Fiscal Year
GA	General Assembly
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GOE	Government of Egypt
GTZ	German Technical Assistance Agency
HC	Holding Company
HEIA	Horticultural Export Improvement Association
IDA	International Development Association
IFC	International Financial Cooperation
IPPC	International Plant Protection Convention
IPO	Initial Public Offering
IIMI	International Irrigation Management Institute
IR	Intermediate Results
ITC	International Trade Center
JETRO	Japan Export Trade Organization
Kg.	Kilogram
Kt.	Kentar
Libra	Pound of 0.45359 kilogram, also abbreviated as lb.

<i>ACRONYM</i>	<i>DESCRIPTION</i>
LE	Egyptian Pound
LK	Lint Kentar of cotton, 50 kgs.
LOE	Level of Effort
LS	Long Staple cotton
MALR	Ministry of Agriculture & Land Reclamation
MENA	Middle East North Africa
MEIC	Ministry of Economy & International Cooperation
MIMW	Ministry of Industry & Mineral Wealth
MT	Metric Ton
MOF	Ministry of Finance
MoTS	Ministry of Trade & Supply
MPE	Ministry of Public Enterprises
MPWWR	Ministry of Public Works & Water Resources
MLS	Medium-Long Staple cotton
MVE	Monitoring, Verification & Evaluation Unit
NARS	National Agriculture Research Center
NBE	National Bank of Egypt
NCF	National Consulting Firm
NFPA	National Food Processor Association
NGO	Non-Governmental Organization
O & M	Operation & Maintenance
OSAF	Office for Studies And Finance
OVR	Office of Variety Testing & Registration
PA	People's Assembly
PBDAC	Principal Bank for Development and Agricultural Credit
PEO	Public Enterprise Office
P&L	Privatization & Liberalization
PIDP	Partnership In Development Project
PMU	Project Management Unit
PPC	Program Planning Committee
PRA	Participatory Rapid Appraisal
PU	Purdue University
PVP	Plant Variety Protection
RETD	Real Estate Tax Department

<i>ACRONYM</i>	<i>DESCRIPTION</i>
RDI	Reform, Design & Implementation Unit
ROW	Rest of the World
SCC	Sugar Crops Council
SCRI	Sugar Crops Research Institute
SIIC	Sugar and Integrated Industries Company
SK	Seed Kentar of cotton (157.5 kgs.)
SPC	Seed Privatization Committee
SS	Short Staple cotton
STTA	Short Term Technical Assistance
SWG	Sugarcane Working Group
TA	Technical Assistance
TAMIS	Technical & Administrative Management Information System
TAT	Technical Assistance Team
TF	Task Forces
TO	Training Officer
TOR	Terms of Reference
TNA	Training Needs Assessment
TRG	Training Resources Group
TSG	The Services Group
UIT	Unified Income Tax
UMD	University of Maryland
USAID	United States Agency for International Development
US\$	United States Dollar
USPMA	U.S. Produce Marketing Association
USDA	U.S. Department of Agriculture
VAT	Value Added Tax
WB	World Bank
WTO	World Trade Organization
WUA	Water User Association

Executive Summary

In continuation of a previous study carried out in May, 1997 concerning cotton lint import under the benchmark, another study started in March 1999. Such a study was undertaken through a consultancy by **Dr. Taha El-Sharkawy** and **Mr. Eric Joseph** with the assistance of USAID, APRP, RDI and GTZ-CSPP.

- ◀ The team has consulted available information at the local as well as the global levels with particular emphasis on the risks involved with the importation of cotton lint from foreign sources.
 - ◀ The study aimed at establishing a risk assessment and certification system (RACS) to be employed in defining potential sources for cotton lint imports, in addition to what is currently accepted.
 - ◀ The team reviewed the current revised Egyptian phytosanitary regulations, to define and eliminate those lacking scientific support and cannot be justified.
 - ◀ Reviewing the current scientific information concerning the risk of introducing pests and disease agents with cotton lint imports led to the following:
 - The carryover pests of cotton within lint is seemingly low and can be completely eliminated, for fragile pests through processing of seedcotton to lint bales. More information and experimentation are needed for hard-shielded pests.
 - Information regarding processing techniques as of seed cotton as well as tactics employed by different potential countries with respect to different cotton pests are to be compiled and evaluated.
 - Concern should be confined to pests of real quarantine significance in relation to cotton lint.
 - The risk of introducing mites and other tiny pests can be checked through examination and inspection of samples of lint and trash.
 - Risk of carryover of disease agents with lint is mainly confined to trash, seed coat fragments and whole seeds. Therefore, cleaning processes could contribute to the elimination of such contaminants, however, no complete cleanliness could be achieved.
- Available information led to the following:
- ❖ No publication of results are found.
 - ❖ All consultations consider the risk negligible.
 - ❖ Experiments should be conducted to evaluate the risks associated with trash and seed coat fragments.
- ◀ The team recommends an evaluation of all possible sources to be carried out by a scientific expert team. A term of reference for such a team was suggested.
 - ◀ The consultancy team stresses the significance of an import permit or license to be issued by the CAPQ based on an evaluation of the source in question.
 - ◀ The team has put forward a set of recommendations to be considered in the evaluation of a given source, as well as the elements of a risk assessment and certification system.

1. Introduction:

A first study conducted in May 1997 resulted in the following conclusions:

- a risk analysis and assessment in relation with safe management of cotton lint imports should be undertaken (see Annex 1)
- the risk management strategy should focus on the production and ginning processes in the country or region of origin, this being the responsibility of the producers and exporters with the support of the phytosanitary authorities there, rather than placing the burden of safe importation of lint consignments only on fumigation after baling and on controls by the Central Administration of Plant Quarantine.
- In order to make imports of all products more efficient, a review, and revision if necessary, of the Agricultural Quarantine Law is required, together with improvement in the efficiency and effectiveness of the CAPQ in enforcing the regulations.
- If phytosanitary restrictions are too costly or too difficult, textile industry firms will continue to import cotton yarn and fabric, resulting in lost value added and lost employment in the spinning industry.

Based on these conclusions, the following terms of reference for the consultancy were stipulated:

1. Review the revised phytosanitary regulations for the import of cotton lint (Dr. Taha Sharkawy)
2. Review the current scientific information regarding the effects of cotton lint processing (harvesting, ginning, cleaning, baling, etc.) on the presence of pests and disease-agents.
3. Recommend experimental or observational methods by which unavailable information can be obtained.
4. Review the current phytosanitary regulations and recommend means by which those aspects which have no scientific support can be eliminated or improved.
5. Recommend specific changes to the current phytosanitary regulations to incorporate regional risk assessment.
6. Prepares a step-wise time scale for the collection of the necessary scientific information, and the concurrent implementation of the recommendations together with the country or region risk assessment and certification system.
7. Give a seminar on the risk assessment and certification system on completion of the consultancy.

2. Review of the Revised Phytosanitary Regulations for Cotton Lint Imports:

This review was realized in 1998 and resulted in a publication, in the RDI Newsletter, Volume 1, No. 2, June 1998, of the *Regulations and rules relevant to the importation of cotton lint to Egypt* as approved by H.E. Dr. Youssef Wally, Deputy Prime Minister and Minister of Agriculture and Land Reclamation (see Annex 2)

From previous discussions during the first study (see pages 19-21 of the report), it appears that different requirements as listed in Annex 2, are subjected to critics from the part of traders who have experienced the quarantine procedures, as applied in former years, to consignments from USA or from Sudan. These critics were again presented during the discussion following the presentation of this report, at the seminar of March 20, 1999. The traders are supporting the need for regulations preventing the introduction, with imported lint bales, of new pests and diseases of cotton not yet recorded in Egypt. But they doubt the scientific background of certain measures. This clearly indicates the need to investigate very cautiously into the arguments behind these critical elements, in particular:

- the need for vacuum fumigation with MeBr at the port of shipping under the supervision of Egyptian Plant Quarantine inspectors
- the need for double fumigation
- the restriction of the use of imported lint bales to mills outside the Delta area,
- the obligation of destroying the waste resulting in the mills under the supervision of the CAPQ.

3. Review Of Current Scientific Information Regarding The Risks Of Introducing Pests And Disease-Agents With Cotton

Lint Bales:

When examining the risks to be considered in relation to the importation of lint bales, we took care of the questions raised at the end of part 1., as follows:

Potential risks of carrying over pests and disease-agents of quarantine significance for Egypt, originating in the cotton crop, were analyzed separately from the risks of introducing quarantine pests, which do not occur in cotton crops, but may be damageable to other crops of economic importance in Egypt, like potatoes, vegetables, wheat, citrus, date-palm and other fruit trees, etc. Such pests may be carried over as hitchhickers, which incidentally are deposited on the package, the covers of lint bales, in the storage or transport facilities used or in/on the containers, but are not expected to be present within the lint itself.

When evaluating the risks of carry over of quarantine pests and disease-agents of cotton, the different processings from seed cotton to lint bales should be considered, as already indicated in Annex 1.

3.1 Review of information concerning the risks of carry over of pests with cotton lint bales.

Thanks to Internet and e-mail connections, a first review led to a list of publications dealing with the effects of ginning, cleaning and baling of seed cotton to lint bales on the survival of pests in or on the lint, and to statements by experts from different countries (see Annexes 3 and 4)

It is remarkable in this connection that experimental work on this subject has started already more than forty years ago, aiming at providing scientific knowledge needed for the establishment of domestic regulations in countries, like the United States of China, facing the risk of spread of the Pink bollworm after its production. The results of extended tests in different Chinese provinces, with specified techniques of cleaning, ginning and baling of seed cotton to lint bales, on the survival of Pink bollworm larvae are given in table 1, Annex 5.

The contribution to the overall 100% mortality of the different processes of cleaning the seed cotton, ginning and baling the lint were analyzed separately. 95.4% of larvae were already to injuries caused by the moving seeds and dry impurities. The ginning engine itself, in particular the high speed saw-cylinder and brush-roller result in a killing-efficiency of 99.76%. Finally, the few larvae, which could escape cleaning and ginning would be killed up to 99.79% through the baling process, using a pressure up to 90 with a resulting density of 300 to 400 kg/m³. Eleven larvae out of 5300 artificially added to the lint, which escaped the baling experiments, were protected from the pressure in localized dense pockets of lint.

These results indicate that relative fragile pests, like lepidopteran larvaem, aphids, bugs, whiteflies, thrips, possibly even mites, will be injured through the different processes and are likely to be killed to a high degree. These effects might be different for hardshelled insects like weevils.

Other tests using common processing techniques, were slightly less effective (table 2, Annex 5)

The results support the view, that in any case, a risk assessment and certification system should include the list of specified techniques to be used in the cleaning, ginning and baling process.

Similar tests conducted in the USA indicate that lint processed through saw-type cleaners does not contain any live Pink bollworm. Other experiments, resulting in a high level of mortality of Pink bollworm, were realized in order to prevent the risk of larvae to be carried over though the waste of ginning mills. These experiments resulted in the USDA / APHIS, Plant Protection and Quarantine Programs 1979, Domestic program manal M 301, 52, Pink bollworm (*Pectinophora gossypiella* Saunders).

Different cotton pests may survive on or inside the seeds, e.g. *Dysdercus* spp., *Pectinophora scrutigera* Holdaway, (G.A. Matthews and J.P. Tunstall, *Insect Pests of Cotton*, CABI International, 1994). It is therefore of particular importance, that the lint to be imported is to be fully clean of seeds, before being baled.

Experts from USDA / APHIS expressed the view that current practices of ginning and baling in the US would not allow for survival of Boll Weevil (see Annex 6). At CIRAD / Montpellier, France, Dr .M. Vaissayre expressed the view, that seed cotton presented a major risk of transmitting pests and disease-agents, but that risks associated with the largely practiced international trade of cotton lint seemed much lower.

The conclusions of this provisional review are:

- the risk of carry over pests of cotton within imported lint bales is seemingly low,
- these risks will probably be eliminated up to 100% for fragile pests by particularly specified processing techniques of seed cotton to lint bales,
- the lint should be fully freed of seeds before being baled,
- before reaching a final position concerning the risk involved with imports of lint bales more experiments are to be conducted in order to analyze the efficiency of different processing techniques, as used in different potential exporting countries (see Annex 7), in eliminating hardshelled pests of high risks like e.g. the Boll weevil,
- these experiments are to be limited to pests of real quarantine significance in relation to the importation of lint bales into Egypt, disregarding other pests of cotton, which are not expected to be present in / on the lint and of other hitchhiker pests,
- the risk of introducing mites should also be considered through examination of samples of trash remaining in or on the lint.

3.2 Risk of carry over of disease-agents with cotton lint.

Fungal or bacterial diseases may infect cotton plants at different growing stages. The main risks of carry over to be considered in relation with cotton lint are reproducing forms and like spores, pycnidia, chlamydospores, perithecia, or rust spores, which can survive for long periods on trash or seed coat fragments and in or on the soil, before producing a new infectious phase of a host plant. The elimination of such risks through the processing of seed cotton to lint bales are related to the cleaning system in use in the ginning mill. The cleaning techniques have been designed in order to eliminate trash, seed coat fragments, motes of dust and neps, which reduce the value of the lint in view of further use. Cleaning may be applied already during harvesting and before or after the ginning. Different methods are in use – air fan, saw stripper, rolling brushes – with different level of elimination waste particles. The efficiency of eliminating dust is high, but the cleaning of trash and seed coat fragments is less efficient and higher level of elimination cannot be reached, even with complementary equipment. These will initiate more costs and seem to produce higher number of seed coat fragments, i.e. a wider distribution of potential disease-agents within the waste. Complementary saw-type cleaners may also negatively affect the quality of the fiber – micronaire and staple length (Annex 8).

So far, no experimental results have been found regarding the carry over of disease-agents on trash and / or seed coat fragments. USDA – APHIS – PPQ expresses the view that prevention of introducing cotton diseases need no particular regulations in relation to cotton lint imports (see Annex 5)

In this context the risks of introduction of nematodes parasites to cotton, was also considered. In most cases, this risk is related to the contamination of the lint with soil particles. It is admitted so far that these particles are eliminated to a high level through the cleaning process of lint. It is also to consider that soil particles originating from cotton growing countries may be introduced into Egypt with different goods, which so far are not submitted to particular phytosanitary requirements in this respect despite

the PQ efforts to prevent it. Therefore, the view expressed by USDA – APHIS – PPQ seems coherent with the actual knowledge.

Diseases caused by virus or virus-like organisms are of major concern, in particular those already present in African countries, like the Cotton Leaf Curl Virus in Sudan. This virus has recently spread into Pakistan, causing decisive damages, and is considered a major threat to neighboring countries like India, Iran, Uzbekistan, where the whitefly, *Bemisia tabaci* (Laird and Dickson, 1959) is already present. (ICAC Recorder, December 1992). The whitefly is well known in Egypt and could easily spread the virus after its introduction. This is only possible within living whiteflies (Cotton Diseases, R.J. Hillocks, CAB International, 1992), which should not survive the processing of seed cotton to lint bales. The pest is not able to survive outside of a living plant support and therefore its transport as hitchhiker, e.g. from Sudan to Egypt, is not probable. But it may be carried airborne over long distances.

The Biotype B of the whitefly, *Bemisia argentifolii*, was introduced to Australia in 1993 with pointsettias legally imported from California (The Australian Cottongrower, Volume 16, No. 5, September-October 1995). This clearly indicates, that implementing the regulations governing the importation of living plants, either by trade or in the baggage of passengers, is of great importance in order to prevent the introduction of virus or virus-like organisms of cotton and other crops.

The conclusions of the review of information concerning the carry over of disease-agents-bacteria, fungi, nematodes, virus and virus-like organisms – with cotton lint and the risks associated with them, are:

- no publications of results were found so far,
- foreign experts consider these risks as negligible
- the efficiency of elimination through cleaning processes of trash and seed coat fragments, which might carry over disease-agents, and the risks associated with them does not reach as high levels as in the case of insect pests.
- The cleaning processes originate more costs and may reduce the value of the lint,
- Further experiments should be conducted in order to evaluate the risks associated with trash and / or seed coat fragments.
- Risks of transmission of virus and / or virus-like organisms are linked to the carry over of the vectors involved. These are not likely to survive the processing from seed cotton to lint bales, nor to be carried over as hitchhikers.
- The prevention of introductions of virus and virus-like organisms are linked to the strict implementation of quarantine requirements related to the importation of living plants in trade and in passenger baggage.

4. Recommendations of experimental or observation methods by which unavailable information can be obtained.

The review of existing publications concerning the effects of processing seed cotton to lint bales, not yet completed, should be finalized.

These effects should be also subjected to experiments with three objectives:

- evaluate the effects of processing on survival of Boll weevil, *Anthonomus grandis*

- investigate the residual contamination with mites of samples of trash and seed coat fragments,
- determine the level and spectrum of contamination of trash and seed coat fragments with bacteria and fungi of quarantine significance for Egypt.

4.1 Experiments concerning the survival of Boll weevil in lint bales:

The following elements should be considered:

- artificially infested seed cotton is to be processed through cleaning, ginning and baling,
- the effect of each process is to be established separately by counting the surviving weevils,
- different types of machinery of common use in potential exporting countries (ICAC Recorder, Dec. 1997) should be experimented, i.e.:
 - cleaning: air fan, saw stripper, roller brushes
 - ginning: saw ginning and roller ginning
 - baling: low and high density baling
- the speeds applied for cleaning and ginning should range from the lowest to the highest as commonly used.

The experiments could be conducted in the USA, possibly at one of the USDA – ARS labs dealing with these topics, e.g. the Southwestern Cotton Ginning Research Laboratory in Mesilla Park, NM.

4.2 Experiments concerning the contamination with living mites of trash and seed coat fragments in or on the lint.

These experiments should be conducted in Egypt and based on the following elements:

- parallel samples of lint are taken from imported and domestic lint bales with relatively low and high level of trash and seed coat fragments contents,
- the samples are submitted to an extraction procedure of mites
- the extracted mites are determined and counted at different stages.

4.3 Experiments concerning the contamination of trash and seed coat fragments with bacteria and / or fungi of quarantine significance for Egypt

The objectives of these trials would be to provide information relevant to:

- ◀ Survey of carryover disease agents and other organisms associated with lint, through direct plating or after incubation under conducive conditions.
- ◀ As the trash and seed coats being a major source of contamination with different disease agents, they have to be monitored as pathways for disseminating such organisms. Therefore, a surveillance of the types and frequencies of disease agents in trash and seed coat fragments is very important. Plant parts (trash and seed coat fragments) could also be surveyed from local seed cotton and monitored throughout ginning and baling.

- ◀ Comparative surveys should be made on imported and locally produced cotton lint.
- ◀ Establish a clear picture and correlation between cleaning, resulting in an increase in the number of trash and seed coat fragments although smaller in sizes, and the occurrence (types and frequencies) of different disease agents.
- ◀ Establish the period of survival of different disease agents associated with lint, trash and seed coat fragments.

5. Review of current regulations and recommendation for elimination of those lacking scientific support (see Annex 2)

5.1 Requirements concerning the fumigation of lint bales

The current regulations include three different fumigation requirements:

1. By principle the bales are to be fumigated at the port of shipment, with MeBr, possibly under vacuum, under supervision of CAPQ inspectors.
2. If at the port of shipment, only atmospheric fumigation is available, a second fumigation under vacuum is to be executed upon arrival in Egypt.
3. If the bales are to be processed in mills situated in the Delta area, the fumigation has to be repeated.

What is the exact aim of the fumigation procedure? Can it deal with pests inside the bale or does it affect only those infesting the surface?

Due to the pressure used for baling lint to high density bales, the pesticide-gas cannot penetrate totally the lint inside the bale. This can not be achieved even under vacuum conditions. Therefore, elimination of pests originating in the cotton crop or having infested the seed cotton before ginning cannot be reached by fumigation of the bales, but must be achieved either through their recognized absence in the region of origin or be eliminated through the destructive effects of the processing of seed cotton to lint bales as described in part 2.

Fumigation of bales is directed at hitchhiker pests infesting the bales during storage at the ginning mill or in the port of shipment, or during transport. In this case, we shall consider that such hitchhikers will often be any insect, without ability of damaging important crops, i.e. with no quarantine significance for Egypt. But they may be real pests, able to damage cotton or other crops of economic importance and their introduction should be prevented. Fumigation is applied to the majority of imported agricultural consignments either in the country origin or in transit. Certain commodities such as ornamentals and small parcels accompanying passengers are not so treated, however, subject to inspection.

When we consider possible origins of imported lint bales, the relative frequency of hitchhiker pests infesting them, compared to the risk that they might be introduced into Egypt with other items, decreases when the bales are imported from neighboring countries, because of the wide spectrum of trade and the closeness which may involve some degree of similarity as to the pests and disease agents. In this case, the fumigation requirement may not be scientifically justified and could be suspended

without additional risks for Egyptian crops, if inspection proves freedom of pests of quarantine concern, and shipping is made in closed containers.

For lint bales originating in distant countries, their relative importance as transport means of hitchhiker pests is higher and therefore justifies the fumigation requirement. But of course these considerations are only valid when the bales are transported in closed containers sealed at the ginning mill or shipping port and opened only at the spinning mill in Egypt.

The efficiency of the fumigation results of the dosage multiplied with the duration at a given temperature. Fumigation aiming at hitchhiker pests does not require vacuum conditions and can be achieved through adapted combination of dosage and duration.

As the fumigation facilities in use at different ports of entry into Egypt are of relatively small capacity, it seems preferable to require that the fumigation should take place at the port of shipment.

The obligation to repeat the fumigation upon entry in Egypt or before the transport to a spinning mill in the Delta area is not justified, if the requirement of transporting the bales in new closed containers, sealed at the ginning mill or at the port of shipment is fulfilled. The obligation of fumigating imported lint bales moving from one mill to another has no scientific support either as they have already been granted entry based on fulfilling specific requirements or as lint of domestic origin is not submitted to a similar requirement.

5.2 Requirement concerning the absence of any quarantine pests and diseases in the country or region of origin.

This requirement can be supported if the quarantine organisms of concern may be introduced within imported lint bales, i.e. that the required freedom is to be attested for pests and diseases affecting the cotton crops in the region of origin and can be transferred through ginned cotton (lint), but not, as already explained, for any pest or disease of quarantine significance for other economically important crops in Egypt. Such pests shall be dealt with through fumigation.

Therefore, we recommend to establish and publish a list of quarantine pests and diseases, for Egypt, which may be transported within imported lint bales. Only these organisms should be considered in relation to the required absence from the country or region of origin.

This requirement should be considered as fulfilled upon the analysis of records of the visit of Egyptian experts, as presented in a written report. A proposal of terms of reference for such a visit is given in Annex 9.

5.3 Requirement concerning the freedom of imported lint from any living seeds

This requirement is of great importance in order to prevent the introduction into Egypt of quarantine pests and diseases of cotton, which may survive in the seed kernel and

also to prevent the uncontrolled introduction of seeds of non-Egyptian cultivates. Therefore, the experts visiting the region of origin of the imported lint bales should investigate the quality of the cleaning system (s) to eliminate seeds from seed cotton at the beginning of the ginning process. This requirement should be formally integrated into the future risk assessment and certification system, with precise indications of the cleaning machinery to be used.

The requirement that even parts of seed are to be eliminated through the ginning process, should be carefully considered. As seed coat fragments cannot be totally eliminated through the cleaning process, this requirement should only apply to greater parts of seeds which may harbor living pests.

The fulfillment of this requirement is to be checked on the arrival of shipment in Egypt by sampling lint out of the bales. In case of the presence of living seeds in the lint, the shipment is to be rejected. In addition, seed coat fragments are to be examined in the laboratory as a carrier for certain quarantine disease agents.

5.4 Requirement concerning the packaging bales

This requirement makes sense in order to prevent the carry over of hitchhiker organisms originating in the region of production on package materials and covers of the bales.

5.5 Requirement concerning the transport in new and sealed container

This requirement is of particular importance, because if fulfilled, it should allow to import lint bales from the neighboring countries with the least requirement for fumigation and to move them freely outside the Delta area. It is also precondition in order to eliminate the obligation of repeating the fumigation at the port of entry of shipments imported from distant countries.

The transport of lint bales from Sudan into Egyptian territory has so far not been always realized within sealed containers. This should become effective in the future, but because of particular trade-ties between the two countries, it is not feasible to eliminate from the near future importation of Sudanese lint bales, which do not meet this requirement. The particular risks involved with such imports, e.g. Cotton Leaf Curl Virus, should be investigated and appropriate requirements, in particular concerning the fumigation be fixed in the individual import license based on exceptional provisions directed strictly to this case.

5.6 Requirement prohibiting transshipment of containers on their way to Egypt

The objective of such a provision is to prevent the possibility of a pest present in the country of transshipment becoming a hitchhiker on the bales and thus gaining a way to Egypt.

However, the situation differs depending on whether the country of transshipment is cotton producing or not. So, the risk of picking a cotton pest as a hitchhiker is defined. The risk of introducing other hitchhikers is minimized through shipping in containers. This principle of prohibiting transshipment is applied to almost all imported commodities as they are shipped from their country of origin. Another important point is that shipment of cotton lint have to be from the country of production, and re-exported cotton lint bales shall be prohibited, thus fulfilling requirements of the RACS.

5.7 Requirements concerning the destination of the spinning mill to use the lint

The restriction of the use of imported lint bales to mills situated outside the Delta area is justified, if we admit that minimized risks remain of introducing with these imports a cotton pest or disease-agent of quarantine significance. By stipulating that the spinning mill should not be situated in Delta area, the regulation aims at a higher protection of the cotton crops there.

But there might be other provisions which could improve the level of protection of cotton crops near the spinning mill. We suggest that other elements of improving the security of lint bales imports could be implemented such as:

- Imports are allowed only from countries or regions within which are recognized to be free of pests or diseases of quarantine significance, e.g. Boll weevil, Cotton Leaf Curl Virus, etc.
- Imports and use of the lint should take place when no cotton is grown in the Delta area,
- Other host plant to quarantine pests of cotton should be eliminated in the immediate vicinity of the mill.
- Monitoring the surroundings of the mill and destruction of pests, which may emerge from the lint bales and their covers or package, e.g. for Boll weevil with attracting bait sticks or traps.
- Submit the waste resulting from the spinning of imported lint bales to particular requirements in order to prevent their transport and use in or near cotton crops.

The safe and economic use of the waste resulting in the spinning mill remains difficult. We suggest that instead of burning this waste, it might be submitted to composting, a process already in use in the USA.

If these requirements can be met in practice, consignments of imported lint bales could be used in mills situated in the Delta area.

The restriction of moving imported lint bales from one mill to another through desert roads has no scientific support

5.8 Requirements concerning the activities of CAPQ

Different requirements concern the activity of CAPQ. Some are directed at the investigation into the pests and diseases situation in the country of origin of imported lint bales and at the exact fulfillment of particular requirements prior to the shipment

of the bales. According to the IPC, the fulfillment of phytosanitary requirements as given in the regulations of the importing country, is within the responsibility of the Phytosanitary Service of the exporting side and should be attested with the Phytosanitary Certificate (PC). This is of course only possible if these requirements are made public and available to any concerned party. Therefore, and according to WTO rules, the new regulations governing the imports of lint bales into Egypt should be submitted for comment to all interested parties prior to their implementation and publication later on.

The requested visit of Egyptian experts to the potential exporting countries of lint bales should be directed at specific objectives:

- Verify in the region of origin the organizations of surveys of pests and diseases of quarantine significance to Egypt.
- Evaluate the domestic quarantine procedures in use aiming at eradicating or confining in particular areas, the pests and diseases of quarantine significance to Egypt.
- Investigate and evaluate the effectiveness of the different techniques in use in the ginning mills for processing seed cotton to lint bales in order to eliminate therein all pests of quarantine significance for Egypt.
- Verify the effectiveness of the fumigation to be realized in the ginning mill or at the port of shipment.
- The visiting team should record all observations in a written report.

If the visit leads to conclude that the Phytosanitary Service of the exporting country of region is in the capacity of providing sufficiently secure data for the fulfillment of all requirements of the Egyptian regulations, a risk assessment and certification system (RACS) has to be established and fixed in a particular convention or agreement between the two parties.

In order to check the fulfillment of the RACS in individual cases of imported shipments, CAPQ is due to inspect them and examine samples of lint before the consignment is allowed entry into Egyptian territory. But there is no need for anticipating every future export campaign by renewing the visit of Egyptian experts abroad. For example, the requirement that fumigation at the port of shipment is conducted under the supervision of CAPQ inspectors has no scientific justification, but is strictly a matter of confidence between the CAPQ and the phytosanitary authority of the exporting country. The IPPC does not provide any argument supporting this supervision as far as the authority of the exporting country is taking her responsibility to certify in the accompanying Phytosanitary Certificate that the fumigation has been operated according to the Egyptian regulations.

If the visit of Egyptian experts to a potential exporting country leads to conclude, that the different requirements of the new regulations, in particular those of the RACS, may not be fulfilled and accordingly attested by the Phytosanitary Service, imports from this country shall not be allowed.

The requirements concerning the activities of CAPQ related to the import, transport and use of lint bales should be reconsidered, in view of a clear understanding of the expected supervision.

The first element of requirement is the obligation to inform the CAPQ about the mill of destination in Egypt, in particular in or outside the Delta area, in conformity with the import license. Such information is also required in case of a move of an already transported consignment outside the Delta area, but not in case of those allowed to be used in this region.

What is CAPQ expected to do about receiving this information? What does supervision of the use of imported lint bales mean? It means to check the fulfillment of previously fixed requirements, e.g. the storage of imported lint at the mill, and the period of its use before or after the cotton growing season, or the monitoring of Boll weevil with attracting bait sticks or traps. But there are no logic reasons in favor of a permanent presence at the mill of the CAPQ inspectors.

In the action-plan published at the end of the report of the first study, two actions were recommended in order to improve the efficiency and effectiveness of the activities of CAPQ:

- Conduct an institutional analysis of the CAPQ by neutral experts.
- Implement the action plan resulting of the analysis, including training of personnel

We suggest that in direct cooperation with the Undersecretary of State for Plant Quarantine, Dr. Youssef Daoudy, the analysis should be realized soon and the resulting action-plan been started. The need for improvements has been recognized at a meeting, attended by Dr. Daoudy and a team of his collaborators and members of the Plant Quarantine Committee on Friday, 19 March 1999, in particular, the necessity to review the present list of plant quarantine organisms, as fixed into the Plant Quarantine Law, has been recognized.

6. Recommend specific changes to the current phytosanitary regulations to incorporate regional risk assessment

The elements of the RACS to be incorporate into the individual import license are to be established upon the analysis of the report by the visiting team of Egyptian experts. These visits should first take place in neighboring countries, like Syria, Turkey, Greece or Spain, as well as to USA. The draft of a corresponding letter to be addressed to the competent authorities of these countries is given in Annex 10.

But prior to these visits, a new order of MALR is to be established, presented for comment to all concerned domestic and foreign parties, and published. A draft of such an order is given in Annex 11. The already mentioned list of pests and diseases of quarantine significance for Egypt in relation to imports of cotton lint bales, should be published as an annex to the new order.

7. Prepare a step-wise time scale for the collection of the necessary scientific information and the concurrent implementation of the recommendations together with the RACS.

Depending on the list of quarantine pests and diseases related to imported lint bales, to be published as an annex to the new order of MALR – see part 5, the spectrum of information to be gained by further studies of available publications and by experimental work, with the eventual cooperation of USDA – APHIS – PPQ and USDA-ARS, may take more or less time. It is estimated that within the end of 2000, this collection of information and its analysis should be accomplished and the concurrent implementation of recommendations concerning the RACS finalized.

But in view of assuming a real protection of Egyptian cotton crops in future in connection with imports of cotton lint, the necessary improvement of the efficiency of CAPQ activities must be realized. Without such improvement, the new regulations will not meet the risks, whatever small, involved with imports of cotton lint bales.

8. Give a seminar on the risk assessment and certification system on completion of the consultancy

This seminar took place, Saturday, 20 March 1999. The elements of these reports were presented to the audience, leading to a discussion about the following themes:

- ◀ The awareness for protecting Egyptian cotton.
- ◀ Cotton lint imports are going to continue under all circumstances.
- ◀ Egyptian cotton is not used alone but all spinners are mixing it with other cottons.
- ◀ The cotton research institute suggest limiting entry points for imports to ports other than Alexandria, Port Said, and Suez such as Safaga.
- ◀ Concern about pests and diseases in the Sudan.
- ◀ New regulations should be made without delay, however, be based on a good and thorough study and knowledge to avoid or minimize risks.
- ◀ Some concern about the double fumigation.
- ◀ The issue of transshipment was raised and can be dealt with certain provisions.

9. Conclusions:

9.1 Risks of carry over of pests with cotton lint bales

The conclusions of the provisional review of information are:

- The risks of carry over pests of cotton within imported lint bales are seemingly low.
- These risks will probably be eliminated up to 100% for fragile soft-bodied pests by particularly specified processing techniques of seed cotton to lint bales.
- The lint should be fully freed of seeds before being baled
- Before reaching a final conclusion concerning the risk involved with imports of lint bales, more experiments are to be conducted to analyze the efficiency of different processing techniques, as used in different potential exporting countries in eliminating hardshelled pests of high risks e.g. Boll weevil.
- These experiments are to be limited to cotton-pests of real quarantine significance in relation with imports of lint bales into Egypt, disregarding of other pests of cotton, which are not expected to be present in / on the lint and of hitchhiker pests,
- The risk of introducing mites should also be considered through examination of samples of trash remaining in or on the lint.

9.2 Risk of carry over disease-agents with cotton lint

- No publications of results were available
- Foreign experts consider these risks as negligible
- The efficiency of eliminating trash and seed coat fragments, which might carry over disease-agents, and the risks associated with them, through cleaning processes does not reach high level.

- Supplementary cleaning processes present more costs and may reduce the value of the lint.
- Further experiments should be conducted in order to evaluate the risks of disease-agent associated with trash and seed coat fragments.
- Risks of transmitting virus or virus-like organisms are linked to the carry over of the vectors involved, which are not likely to survive the processing of seed cotton to lint bales, nor to be carried over as hitchhickers.
- The prevention of introducing virus or virus-like organisms is linked to the strict implementation of quarantine measures related to the importation of living plants in trade or passenger baggage.

9.3 Further experimental work

The review of existing publications should be finalized

Further experiments should be conducted with three objectives:

- Evaluate the effects of processing seed cotton to lint bales on survival of Boll weevil
- Investigate the residual contamination with mites samples of trash and seed coat fragments.
- Determine the level and spectrum of contamination of trash and seed coat fragments with bacteria and fungi of quarantine significance for cotton crops in Egypt.

9.4 Review of actual regulations and elimination of those lacking scientific support

- Elimination of pests infesting seed cotton can only be achieved through the processing to lint bales.
- The gas used for fumigation cannot penetrate totally the lint inside the bales and therefore is mainly directed at hitchhicker pests.
- The risks of introduction of hitchhicker pests with imports of lint bales is to be compared with those related to other goods or items imported without fumigation.
- For lint bales originating in neighboring countries – e.g. in the Mediterranean region – the relative significance of carrying over hitchhicker pests is low due to the importance of interregional trade and traffic, and therefore fumigation should be reconsidered in the light of the evaluation of such countries.
- For lint bales originating in more distant countries, the risk of introducing hitchhicker pests is more important and the fumigation may be justified.
- Methyl bromide might be replaced with an other active substance, e.g. phosphine, and should be evaluated.
- Fumigation directed at hitchhickers may not require vacuum conditions.
- As facilities in Egyptian ports are relatively small, fumigation, when required, could best take place at the port of shipment.
- Repeated fumigation upon arrival in Egypt or before transport to a mill inside the Delta area, if not indicated from the results of the inspection of the shipment, is not justified.

- The absence of pests and diseases of quarantine significance for the cotton crop in Egypt should only be required if they may be carried over within lint bales,
- The list of these pests and diseases should be published.
- Pests of concern for other crops should be dealt with, if necessary, through fumigation,
- Imported lint bales should be fully free of seed and parts of seed through cleaning with specified machinery.
- The absence of seeds and parts of seeds should be verified upon arrival of the shipment into Egypt by examination of samples.
- Package and covers of the imported bales should be specified and be new.
- Lint bales should by principle be transported within new, sealed containers.
- For imports from Sudan, bales transport without containers can still be accepted, but the risk of introducing Cotton Leaf Curl Virus should be dealt with by appropriate requirements (fumigation), to eliminate the vector.
- Transshipment of containers on their way to Egypt should be prohibited.
- Shipment of re-exported consignments of lint bales shall be prohibited.
- The restriction of using imported lint in mills outside the Delta area should be maintained, if particular requirements, as the following, are not fulfilled: freedom of pests and diseases of quarantine significance in the region of origin, import and use only between cotton growing seasons, elimination of other host plants of quarantine pests and diseases in the immediate vicinity of the mill, monitoring and destruction of Boll weevil in the surroundings of the mill and particular requirement concerning the use of the waste.
- Investigate safe and economic use of water resulting in spinning mills through composting.
- The restriction on moving imported lint bales from one to another through desert roads is not justified.
- In view of establishing a risk assessment and certification system regulating the imports of lint bales in future, teams of Egyptian experts should visit the potential exporting countries, in order to verify in the region of origin the organization of surveys of pests and diseases of quarantine significance to Egypt and evaluate domestic quarantine measures dealing with these organisms, to investigate and evaluate the processing techniques used in ginning mills, to verify the effectiveness of the fumigation,
- The visiting team should record all observations in a written report according to their terms of reference.
- If the visit of the Egyptian experts-team leads to conclude that the different requirements concerning the eventual imports of lint bales may not be fulfilled and accordingly cannot be attested by the Phytosanitary Certificate, imports from the corresponding country should not be allowed.
- Otherwise, there is no need to anticipating every future importation campaign by renewing the visit of Egyptian experts abroad, unless certain problems arise.
- The importer is to inform the CAPQ about the mill of destination in Egypt, with special consideration of mills situated inside the Delta area.
- The CAPQ is then able to check the fulfillment of the requirements concerning the destination and use of the imported lint bales.
- The permanent presence of CAPQ inspectors at the spinning mill is not required.
- The efficiency and effectiveness of CAPQ activity need to be improved, as already been recognized by the first study.

10 . Recommendations

In view of the fact that MALR has already approved the principle of widening the sources for cotton lint imports to satisfy the needs of the local spinners for short staple cotton, recommendations towards achieving a new set of provisions and plant Quarantine regulations are emphasized. In doing so, the issue is to be handled in a more factual and scientific way so that PQ decisions are justifiable and compatible with WTO regulations and IPPC provisions.

In this context, it is very significant that a system be constructed to assess the risk involved of introducing a pest and / or disease agent with such imports.

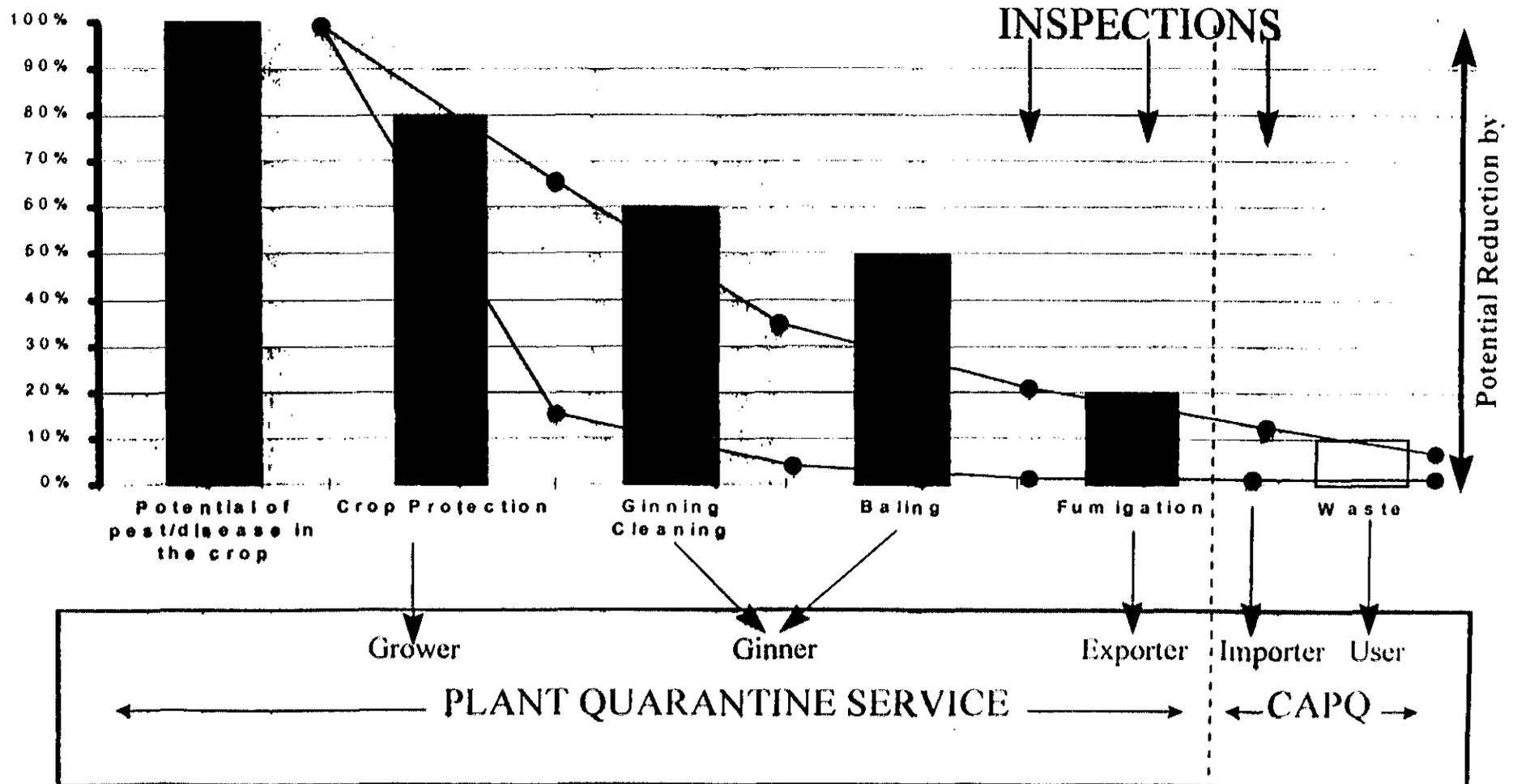
Such a system should consider a number of elements relevant the country of origin with respect to the kinds of pests and disease agents and their quarantine significance. In addition, the efficiency of processing seed cotton to baled cotton is to be seriously considered and analyzed.

Therefore, a set of recommendations are put forward:

1. Freedom of the country of origin from any quarantine pest or disease agent that could be carried within cotton lint bales. This necessitates the establishment of such a list .
2. Lint should be free from live seeds or large seeds parts.
3. Baling should be made at the UDP which leads to a density of 300 + kg / m³ and should use new packing material to minimize the carryover of hitchhickers.
4. Transport should be in new tightly sealed containers, thus avoiding double fumigation upon arrival.
5. Direct shipping is required and transshipment cannot be done without (conditions) provisions.
6. Cotton lint should be imported directly from the country of production. Reexported consignments shall be prohibited.
7. Imports and processing may be scheduled during the period when cotton is not grown in the fields, particularly in mills situated in agriculturally intensive area e.g. Delta.
8. The vicinity of mills shall be free of potential hosts of any pest or disease agents.
9. Monitoring and surveillance of the neighborhood of processing mills for pests is suggested .
10. Through agreement between PQ and processor, waster shall be dealt with in a manner other than burning such as composting.
11. Egyptian experts should visit potential exporting countries to evaluate the pest status processing of seed cotton to lint bales and verify the safety of imports.
12. Conduct further experiments on the reducing effects of processing on the survival of pests and the carryover of disease agents.

Anneke (1)

RISK ASSESSMENT AND MANAGEMENT - OPTIONS



Annexe 2
Approved Regulations and Rules for Egyptian importers

The MALR is committed to a reform program of privatization and liberalization. This commitment includes the codification and publication of current phytosanitary regulations with respect to cotton lint imports. These regulations and rules, that are relevant to the importation of cotton lint to Egypt, are mentioned below. The following regulations are to be considered by Egyptian importers:

1. Importation of cotton fibers free from seeds directly from the country of production in UDP bales, unless shipped in sealed containers.
2. Fumigation at the port of shipping under the supervision of Egyptian Plant Quarantine inspectors (vacuum fumigation with Me Br). Atmospheric fumigation can be accepted when vacuum fumigation is unavailable (exception); however, vacuum fumigation must be made upon arrival in Egypt.
3. Origin should be free from any quarantine pest or disease as confirmed by formal data and reports based on field visits by technical and PQ teams during **growth season. (No restriction on origins as long as the safety measures and PQ requirements are fully satisfied).**
4. Refumigatin is made for bales destined to processing at Kafr El-Dwar, Kom Hamada, Zagazig and other places except Alexandria, Helwan, Al-Amrya and Suez.
5. Imported cotton is to be processed under the supervision of PQ and following its regulations except in El-Mahallah El-Kobra (prohibited).
6. No imports can be transported from one place to another without the approval of PQ.
7. Samples to be taken during processing for pathological and entomological check in certain cases.
8. Surveillance by PQ inspectors to confirm data on the remaining quantities in storage.
9. Much more preferable to ship in containers.
10. Movement within the country is permitted through desert roads and under complete control.
11. In all cases, wastes accompanying processing are destroyed under the supervision of PQ.
12. Ginning plants are evaluated by PQ inspectors.
13. Cotton fibers should be free from seeds or parts of seeds.
14. Samples are taken and sent for examination in Egypt before shipping is allowed.
15. Fumigation is made before shipping in the country of origin.
16. Bales should not be contaminated with seeds.
17. Processing is mainly at Misr-Iran in Suez under PQ supervision.
18. Refumigatin is made on quantities moved into other areas.
19. Strict surveillance is made on handling such quantities by PQ.

Annexe 3 Information regarding the effects of processing seed cotton ton lint bales on the survival of pests and/or disease-agents in the lint - List of publications consulted

Insect Pests of Cotton. *Matthews G.A.; Tunstall J.P.* CABI International, 1994.

Cotton Diseases. *Hillocks R.J. et al.* CAB International, 1992.

An efficient and economic way of killing pink bollworm in commercial cotton. *Guan-LH.* Proceedings of the Third International Working Conference on Stored-Product Entomology. October 23-28, 1983, Kansas University, Manhattan, Kansas USA. 1984, 583-593.

Pink bollworm mortality using large-diameter, gin-trash fans. *Hughs-SE; Staten-RT.* Applied Engineering in Agriculture. 1995, 11: 2, 281-284.

Lint Cleaning Options to Preserve Fiber Quality at Gins. *Mangliardi Jr-G.J.* Applied Engineering in Agriculture. 1996, 12: 5, 555-562.

International Cotton Advisory Committee. Recorder 1989, 1 - 1998, 1. CD-Rom, 1998.

International Cotton Advisory Committee. Bale Survey. 1995. CD-Rom, 1998.

Annexe 4 Effects of processing seed cotton to lint bales on the survival of pests in or on the lint - List of experts consulted

Dr Hertwig Strolz, Executive Director International Textile Manufacturers Federation, ITMF CH 8039 Zurich.

Dr M. Rafiq Chaudhry, International Cotton Advisory Committee, ICAC, Washington 2000 5 DC, USA

Dr M. Vaissayre, CIRAD, Montpellier, France

Dr Bud Petit de Mange, USDA-APHIS-PPQ, Riverdale, MD 20737-1236, USA

Dr Tony Treen, GTZ-CSPP, Dokki, Cairo.

Annexe 5

Efficiency of non-standard total process (Ginning and Baling Workshops)

	Bale Weight (Kg.)	Bale Density (Kg/m ³)	Number of larvae introduced in a bale	Larvae found alive	Efficiency	Inspection time (hours)
Tests						
I	72	300	4.666	6	99.87	5
II	73.5	306	4.666	12	99.74	5
III	82.5	344	4.666	2	99.96	5

Source:

An Efficient and economic way of killing pink bollworms in commercial cotton.

Guan Liang-Hug, 1994, *Proceedings of the Third International Working Conference on Stored-product Entomology*, Kansas State University, Kansas, USA, 583-593.

Facsimile

To: Mr. Eric Joseph, US-AID, Cairo, Egypt
@Fax: (20-2) 336-2009
From: Bud Petit de Mange
Date: Wednesday, March 10, 1999 @ 11:17AM
Re: U.S. Import Requirements for Cotton
Pages: 2, including this

Dear Mr. Joseph,

This is in response to your facsimile dated March 4, 1999, concerning the importation of cotton lint.

The pest of concern for cotton lint in our foreign cotton quarantine is *Pectinophora gossypiella* (Pink Bollworm). APHIS does not regulate cotton lint, per se, for plant diseases. The nematodes and diseases mentioned in the first section of the foreign cotton quarantine are associated with used covers or bags that were originally used for potatoes or wheat and which are now being utilized to transport cotton lint. Those nematodes and diseases are not cotton pests.

Pink Bollworm is a pest of cotton and has been introduced and established in most of the cotton-producing countries of the world, including Egypt. As Pink Bollworm is an internal feeder of cotton flowers, bolls lint and the seeds, it can be transported with these products. It was imported into Mexico in 1910 on infested cotton seed and by 1917 spread north into the United States. We have a domestic quarantine (7 CFR 301.52) to prevent the further spread of this pest into uninfested areas of the United States. There is also suppression and eradication efforts underway in California and some other Western States. We cannot verify that foreign processing of cotton or cotton products mitigates the pest risk before entry into the United States. Therefore, we require cotton to be fumigated as a condition of entry unless it is destined to an approved facility which is not in a cotton growing area and has signed a compliance with APHIS to insure that the cotton lint is properly handled and stored in a way that mitigates any pest risk.

There is one 50+ year old publication showing that pink bollworm larvae may survive in a compressed ball of cotton. The larvae were placed in the middle of the ball by researchers and the cotton was then compressed. We cannot determine if this experiment simulates real conditions since the larvae were not exposed to all of the other hazards that would be expected in the normal ginning process. It should also be noted that we allow imported cotton to be

fumigated at normal atmospheric pressure (as opposed to vacuum fumigation), but the exposure time is longer.

I have asked the APHIS staff handling the boll weevil eradication program if they have technical/scientific reports showing the effects of ginning and bailing on boll weevil. If such information exists, I'll forward that to you as soon as possible. For information, boll weevil has been eradicated from many states, mostly in the Southeast United States (Virginia to Georgia), and in Arizona and California in the West. Therefore, areas free of the boll weevil now exist and the free area grows larger every year.

I hope this answers your questions. If not, feel free to contact me at the numbers, or e-mail address, found at the beginning of this fax.

Sincerely,



Bud Petit de Mange

Director of Phytosanitary Issues for Europe, Africa,
Australia and New Zealand
Phytosanitary Issues Management
Plant Protection and Quarantine

Annexe 7

System of Ginning in Some Countries

Countries	Saw Ginning	Roller Ginning	No. of Total Gins
	(% of Total Production)		
Argentina	98	2	
Australia	98	2	39
Brazil	99	< 1	460
China (Mainland)	99	1	
Egypt		100	
India	40	60	46989
Pakistan	98	2	1140
Spain	91	9	21
Sudan		100	40
Turkey	25-30	70-75	827
Uganda		100	23
USA	98	2	1306

Source: ICAC report "New Development in Ginning", December 1997

Annexe 8
Effects of Lint Cleaning on Quality
-3- Lint Sample

Lint Cleaning Treatment	Micronaire	HVI cm	Trash %	Seed Coat no.	Fragment mg
No lint cleaning	4.42	2.964	1.2	45.7	21.0
Air lint cleaning	4.42	2.934	1.1	43.9	18.8
1 Saw lint cleaner	4.43	2.893	0.5	53.8	22.9
Air & 1 saw lint cleaner	4.47	2.898	0.7	50.2	17.7
1 Saw cleaner split	4.38	2.888	0.6	52.6	16.9
2 Saw cleaners	4.44	2.890	0.5	57.3	16.3

Source:

Lint cleaning options to preserve fiber quality at gins , Applied Engineering in Agriculture, 1993, 9(*): 365371.

Annexe 9:

Proposed TOR's for phytosanitary experts v isiting potential exporting countries

Groups of egyptian experts have visited several countries in former years in order to evaluate the risks of introducing pests and diseases not known to occur in Egypt with imports of cotton lint from these countries.

Unfortunately, the results of these visiting parties have not been reported. At least we did not found any document. We also didn't found any reports regarding the phytosanitary inspections which are thought to have taken place at the importing site. I.e we cannot base new considerations regarding the risks involved with imports from these countries on such documents.

We are proposing that such visits of phytosanitary experts should also take place before the importation of cotton lint is allowed in future, The reports of these visiting parties should be used later on for establishing the detailed requirements composing the risk assessment and certification system to be applied in order to issue the import license. Therefore it is of essential for the functioning of the risk assessment and certification system, that egyptian experts visiting any individual potential exporting country should establish a full report of their activites and of the informations recorded there.

In this perspective, we propose that the delegation of these experts should based on a contract including the following terms of reference:

1 informations to be collected and reported before leaving Egypt

- establish lists of pests and of diseases already known to occur in cotton crops **of the country based on documents, e.g. CABI maps of distribution of pests and dieases**
- compare the previous mentioned lists with the lists of quarantine pests and diseases of cotton of particular concern with the importation of cotton lint bales into Egypt (annex to the new Order),
- establish a list of quarantine pests and diseases of particular concern in view of the visit to the individual country.

2 Informations to be collected in the visited country and / or through documents or through the discussions with the responsible authorities there:

a) actual situation of pests and diseases occuring in cotton crops, i.e.

- list of pests and diseases recorded,
- distribution of the individual organisms in the country and methods of survey or monitoring used,

- control measures applied to these organisms.

b) possibilities of applying a risk assessment and certification system in view of exporting cotton lint bales, in particular:

- techniques of processing seed cotton to lint bales, including the package and cover used,
- fumigation facilities available,
- methods of inspection for quarantine organisms bales
- inspection procedures to be applied in order to issue a Phytosanitary Certificate.

c) present status of phytosanitary regulations implemented for imports of seed cotton, cotton lint or linters and waste in the visited country.

- legal document concerning these imports
- practical aspects of implementing the regulation, i.e. inspection procedure and methodology, fumigation,
- data from reports of imports during the last (ten) years, in particular reports of phytosanitary inspections
- regulation and procedure applied in case of imports of reexported consignments.

d) present status of phytosanitary regulations regarding exports of cotton lint:

- legal document
- procedure applied .

Annexe 10

Ministry of Agriculture and Land Reclamation

Order no

indicating provisions for Licensing the Importation of Cotton Lint Consignments

The Minister of Agriculture and Land Reclamation:

after reviewing Article 89 of Law 53/1966, in accordance with the Law of Agriculture,
and Order 54/1967 prohibiting the entry of some plants, plant products and certain materials,
and with the approval of the Plant Quarantine Committee,

Orders:

1 - As for consignments of baled cotton lint, their entry can be permitted into the Republic according to the following provisions:

a) **The risks that such consignments might harbour pests and/or disease agents not yet present in Egypt, as listed in Annex 1, are to be evaluated prior to the issuing of an import license.**

b) This evaluation should consider in particular:

- **the pests and diseases occurring in cotton crops in the country/region of origin,**
- **the measures applied to eliminate, or to deal with these pests and diseases in the crops,**
- **the possibilities that pests and disease agents originating in the crop will survive the processing of seed cotton to baled cotton lint, and risk involved, if any,**
- **the procedures regarding package, treatment and means of transport of the bales aiming at preventing the risk of carryover of hitchhiker pests.**

c) **As a result of the evaluation, a risk assessment and certification system is to be established considering the particular conditions prevailing in the country/region of origin.**

d) **Consignments of cotton lint can be permitted entry from countries/regions which have proved to satisfy the requirements of the risk assessment and certification system, as attested in the accompanying phytosanitary certificate.**

2 **The risk assessment and certification system to be established according to letter article 1 indent c, is to be based on the results of experiments regarding the possible effects of the processing of seed cotton to baled cotton lint on the**

survival of pests and the contamination of the lint with disease agents. These experiments should include the pests and diseases listed in annex 1.

3. The license for the importation of cotton lint should be issued in accordance with provisions of Order 58/1967.

4 Upon arrival at the port of entry in Egypt, the consignments shall be announced to the CAPQ which shall carry the necessary phytosanitary inspection.

5 Should any of the pests and/or disease agents listed in annex 1 be detected during the inspection procedure, the consignment shall be refused entry into the Republic.

6 In order to further minimize the risks of introducing quarantine pests and/or disease agents with the cotton lint, complementary provisions regarding the monitoring of the neighborhood of the mill, where the cotton lint is to be processed, in order to detect pests through the use of specific traps or other means, and the use of the wastes resulting during the processing of the lint can be arranged or defined by the CAPQ in cooperation with the mill owner.