

# **ISSUES PAPER**

## **RISK ANALYSIS OF THE IMPORTATION OF MAIZE (*ZEA MAYS L.*) GRAIN FROM THE USA**

19 August 1998

# **ISSUES PAPER ON RISK ANALYSIS OF THE IMPORTATION OF MAIZE (*ZEA MAYS* L.) GRAIN FROM THE USA**

## **PURPOSE OF THIS PAPER**

The purpose of this paper is to:

- (i) provide background information regarding the proposed import of maize grain from the USA;
- (ii) advise stakeholders of the pests identified as of quarantine concern to Australia in previous reviews and provide a list of relevant references (Attachment 1);
- (iii) advise stakeholders of the terms of reference of the Risk Analysis Panel (RAP);
- (iv) advise stakeholders of the Technical Working Groups (TWGs) being formed by the RAP and the terms of reference of the TWGs;
- (v) outline key further stages in the import risk analysis process and a revised timetable for stakeholder consultations; and
- (vi) invite stakeholders' comments on issues relevant to the risk analysis.

## **DEFINITIONS**

### **Pest**

Any species, strain or biotype of plant or animal, or any pathogenic agent injurious to plants or plant products.

### **Quarantine Pest**

A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled.

These definitions are in accordance with FAO 1997a (Attachment 1)

## **BACKGROUND**

### **The Import Proposal**

The Australian Quarantine and Inspection Service (AQIS) is considering a proposal for the import of maize grain from the USA for processing and for animal feed use in Australia, including in non-metropolitan areas. The prospective importer has proposed that import conditions should be developed with an emphasis on the management of significant risks offshore.

AQIS notified stakeholders of the import proposal on 19 August 1997. On 5 September 1997, AQIS proposed to stakeholders that the import proposal should be subject to the non-routine import risk analysis (IRA) process outlined in the document, "*Australian Quarantine - a shared responsibility: The Government Response*". After considering stakeholders' comments, AQIS decided in December 1997 that the import proposal will be considered under the non-routine IRA process.

In a letter of 19 December 1997 to stakeholders, AQIS, in addressing the stakeholders' comments, concluded that the import proposal was a high priority. This decision was formally appealed on 19 January 1998 by the Grains Council of Australia (GCA). Following extensive consideration of the material relevant to the appeal and consultation with the stakeholders concerned, the Director of Quarantine has determined that there was no basis for the appeal. Following this determination, the IRA of maize grain will proceed to the next step in the process.

### **Current Quarantine Regulations and Practice**

Australia's current legislation prohibits the import of maize seed and grain except in the circumstances where AQIS issues import permits specifying phytosanitary measures to effectively manage quarantine risks. Imports of maize seed for sowing include the requirement to grow imported seed in quarantine. Bulk imports of maize grain are permitted for processing in metropolitan areas at approved premises under quarantine supervision.

### **QUARANTINE PESTS IDENTIFIED PREVIOUSLY**

Previous risk analyses (Attachment 1) have identified a number of diseases/arthropod pests (Attachment 2) and weeds (Attachment 3) of quarantine concern to Australia, and have considered risk management options. The RAP, with assistance from the TWGs, will review previous work for scope and accuracy and conduct new risk analysis as needed to ensure that relevant information is taken into account.

### **RISK ANALYSIS PANEL**

On 5 September 1997, AQIS sought stakeholders' comments on the proposed membership of a RAP for managing the risk analysis of the import proposal. After considering stakeholders' comments, AQIS selected the following members: Dr Bill Roberts (Chair), Dr Bob Ikin, Mr Bill Magee, Mr Mev Connell and Professor John Irwin (further details provided in Attachment 4). AQIS advised stakeholders of the final membership of the RAP on 19 December 1997.

The RAP met on 15 June 1998 and defined its terms of reference (Attachment 4) and agreed that the Grains and Seeds Market Access Team, Plant Quarantine Policy Branch, AQIS, will provide a technical secretariat for the panel. The RAP will act as a steering committee, oversee the IRA process and make appropriate recommendations on the import proposal to the Executive Director of AQIS.

The RAP will not be responsible for addressing issues which fall outside the scope of the risk analysis, e.g., pesticide residues or the potential economic impact of competition for the domestic producers from the import of maize grain. These issues may be addressed, if necessary, by other relevant areas of the Department of Primary Industries and Energy (DPIE) but are not relevant to the quarantine decision-making process and will not be considered by the RAP.

## **TECHNICAL WORKING GROUPS**

The RAP has established four TWGs to work on different aspects relevant to the risk analysis. Each TWG will be chaired by a RAP member. The names of the members and the terms of reference of each of the TWGs are given in Attachment 5. The RAP may alter the membership of a TWG, if circumstances warrant such action, e.g., when a member is unable to continue this work due to other commitments or if additional resources are required to undertake specific risk analysis activities. It is anticipated that TWGs will operate until the end of 1998. However, the RAP will decide on a needs basis the timing and duration of the TWGs' work on this project. The TWGs would consult with specialists with relevant expertise as needed.

## **FURTHER STAGES IN THE RISK ANALYSIS PROCESS AND THE TIMETABLE FOR STAKEHOLDER CONSULTATIONS**

AQIS advised stakeholders on 19 December 1997 of a risk analysis on the import of maize grain from the USA. The following are the further steps in the IRA process

1. A 60 day consultation period will follow from the date of release of the Issues Paper

During the consultation period on the Issues Paper the RAP intends to

- meet with stakeholders by early August), and
- provide further opportunity for stakeholders to consult directly with the RAP and identify issues to be considered in conducting the technical risk analysis.

2. The RAP will conduct the risk analysis, taking into consideration the comments received from stakeholders on the Issues Paper and input from the TWGs.

When the risk analysis is completed the panel will prepare a draft Import Risk Analysis (IRA) for circulation to stakeholders, by mid December 1998. The paper will include an analysis of the quarantine risks and proposed risk management strategies.

A consultation period of 60 days will be allowed from the date of release of the draft IRA. An additional allowance of about a fortnight for the Christmas and New Year holidays will be made.

3. The panel will then consider stakeholders' comments, finalise its position and make appropriate recommendations to the Executive Director, AQIS, by mid April 1999 on the proposed import and the quarantine conditions that should apply.

The Executive Director of AQIS will decide whether to grant access to the proposed import. Stakeholders are advised of this decision and the commencement of an appeal period (30 days) during which stakeholders may lodge an appeal on the process which was followed during the risk analysis.

If an appeal is lodged, an Import Risk Analysis Appeal Panel will be convened by the Chair of the Quarantine and Exports Advisory Council (QEAC) to consider the appeal.

4. If there is no appeal, or if any problem with the process has been successfully addressed, AQIS will implement its decision on the import access request.

The RAP estimates that the remaining steps in the risk analysis on maize from the USA will take approximately 11 months to complete, following the process outlined above, providing there are no unanticipated delays. Stakeholders will be kept informed of any significant delays or variations to the proposed timeframe.

## **RELEASE OF INFORMATION**

A public file, containing the non-confidential stakeholder comment and technical documentation will be established on this IRA. The public file will be held at AQIS Canberra office and will be available to stakeholders during business hours for perusal and copying. The RAP will notify stakeholders when the public file has been established. Appointments to gain access to the public file may then be made by contacting:

Risk Analysis Secretariat  
Plant Quarantine Policy Branch  
Australian Quarantine and Inspection Service  
GPO Box 858  
CANBERRA ACT 2601  
Telephone number: 02 6272 5094  
Facsimile number: 02 6272 3307

Subject to the *Freedom of Information Act 1982* and the *Privacy Act 1988*, all submissions received with respect to an import proposal will be publicly available and may be listed or referred to in papers or reports prepared on the proposal. If a request for anonymity does not accompany a submission, the respondent will be taken to have consented to the disclosure of his or her identity for the purposes of the Privacy Act. The contents of a submission will not be treated as confidential unless they are marked 'confidential' and they are capable of being classified as such in accordance with the Freedom of Information Act.

## **INVITATION TO COMMENT**

You are invited to comment on any issues relevant to the risk analysis within 60 days. Your comments will be taken into consideration by the RAP when conducting the risk analysis and developing final recommendations on the import proposal. The RAP will accept written submissions until the close of business on Friday 4 September 1998.

Responses should be forwarded to:

Risk Analysis Secretariat  
Plant Quarantine Policy Branch  
Australian Quarantine and Inspection Service  
GPO Box 858  
CANBERRA ACT 2601

## **ATTACHMENT 1**

### **PREVIOUS REVIEWS ON THE IMPORT OF MAIZE GRAIN FROM THE USA**

Phillips, D. (1994). Pest risk analysis of seed-borne pests of barley, maize and sorghum from the USA, and barley from Canada. Part 1. Bureau of Resource Sciences.

Phillips, D., Roberts, W., and Chandrashekar, M. (1994). Pest risk analysis of seed-borne pests of barley, wheat, maize and sorghum from the USA and Canada. Part 2. Bureau of Resource Sciences

Anon. (1994). Report on weed risk assessment on United States and Canada grain for the Grains Task Force. Rivers and Associates.

Roberts, W., Magee, W., Dodman, R., Price, J., McCallum, A., Heinrich, D. and Hartwell, J. (1995). Report of grain mission on sourcing sorghum from USA. Australian Quarantine and Inspection Service, Canberra.

Roberts, W., Magee, W., Dodman, R., Price, J., McCallum, A., Heinrich, D. and Hartwell, J. (1995). Supplementary report of grain mission USA. Australian Quarantine and Inspection Service, Canberra.

Evans, G., Clark, A., Love, J., Cannon, R. and McLean, G. (1996). Quarantine risk associated with the importation of bulk grain - A retrospective analysis. Bureau of Resource Sciences.

### **OTHER RELEVANT REFERENCES**

Anon. (1997). Australian Quarantine: A shared responsibility. The Government response. Commonwealth of Australia, Canberra.

FAO (1995). Principles of plant quarantine as related to international trade. ISPM Pub. No. 1, FAO, Rome.

FAO (1996). Import regulations. Guidelines for pest risk analysis. ISPM Pub. No. 2, FAO, Rome.

FAO (1997a). Glossary of phytosanitary terms. ISPM Pub. No. 5, FAO, Rome.

FAO (1997b). International Plant Protection Convention. (Revised text). FAO, Rome.

GATT (1994). Agreement on the Application of Sanitary and Phytosanitary Measures. p. 69-83. In: Final Act Embodying the results of the Uruguay Round. Multilateral Trade Negotiations, The Uruguay Round, GATT Secretariat, UR-94-0083. Marrakesh, GATT.

Nairn, M.E., Allen, P.G., Inglis, A.R. & Tanner, C. (1996). Australian Quarantine: A shared responsibility. Department of Primary Industries and Energy, Canberra.

## ATTACHMENT 2

### DISEASES OF QUARANTINE CONCERN ON MAIZE IMPORTS FROM USA - AS IDENTIFIED BY PREVIOUS REVIEWS

Pathogen	Disease
<b>Bacteria</b>	
<i>Clavibacter michiganensis</i> ssp. <i>nebraskensis</i> (Vidaver & Mandel) Davis, Gillaspie, Vidaver & Harris	Goss's bacterial wilt
<i>Erwinia stewartii</i> (Smith) Dye	Stewart's bacterial wilt
<b>Fungi</b>	
<i>Peronosclerospora sorghi</i> Weston & Uppal; (syn. <i>Sclerospora sorghi</i> Weston & Uppal)	sorghum downy mildew
<i>Sphacelotheca reiliana</i> (Kühn) Clint. (syn. <i>Ustilago reiliana</i> Kühn)	head smut
<i>Ustilago zaeae</i> (Beckm.) Unger (syn. <i>U. maydis</i> Corda)	boil smut
<b>Viruses</b>	
Maize chlorotic mottle machlovirus	maize chlorotic mottle
Maize dwarf mosaic potyvirus	maize dwarf mosaic
Wheat streak mosaic rymovirus	wheat streak mosaic
High Plain Virus	High Plain disorder

### ARTHROPOD PESTS OF QUARANTINE CONCERN ON MAIZE IMPORTS FROM USA - AS IDENTIFIED BY PREVIOUS REVIEWS

Scientific Name	Common Name
<i>Prostephanus truncatus</i> (Horn)	larger grain borer, greater grain borer
<i>Trogoderma glabrum</i> (Herbst)	
<i>Trogoderma inclusum</i> (Le Conte)	
<i>Trogoderma variable</i> * (Ballion)	warehouse beetle

\*Status in the USA requires clarification.



### ATTACHMENT 3

#### WEEDS OF QUARANTINE CONCERN POTENTIALLY PRESENT IN MAIZE IMPORTS FROM THE USA - AS IDENTIFIED BY PREVIOUS REPORTS

Scientific Name	Common Name
<i>Ambrosia artemisiifolia</i> L. (syn. <i>A. diversifolia</i> (Piper) Rydb.; <i>Ambrosia elatior</i> L.; <i>A. media</i> Rydb.)	annual ragweed; Bitterweed; common ragweed; hay-feverweed; hog-weed
<i>Ambrosia grayi</i> (A. Nels.) Shinnery	woollyleaf bursage
<i>Ambrosia trifida</i> L.	giant ragweed
<i>Asclepias syriaca</i> L.	milkweed
<i>Cenchrus pauciflorus</i> Benth. (syn. <i>C. incertus</i> M. Curtis)	spiny burr-grass; American burr-grass; coast sandbur; lingspine sandbur
<i>Cirsium arvense</i> (L.) Scop. (syn. <i>C. lanatum</i> Spreng.)	corn thistle; creeping thistle; perennial creeping thistle; rankdissel
<i>Convolvulus arvensis</i> L.	cornbine; European bindweed; morning glory; hiranpandi; lesser bindweed
<i>Datura</i> spp. ( <i>D. stramonium</i> L.; <i>D. ferox</i> L.; <i>D. innoxia</i> Mill.; <i>D. leichhardtii</i> F.Muell. ex Benth; <i>D. metel</i> L.; <i>D. wrightii</i> Rogal.)	thornapples; fierce thornapple; downy thornapple; native thornapple; Hindu thornapple; hairy thornapple; chameco; stinkblaar; false castor -oil plant; prickly apple; jimsonweed
<i>Eriogonum annuus</i>	umbrella plant
<i>Erysimum cheiranthoides</i>	treacle mustard
<i>Falcaria siodes</i>	sickleweed
<i>Kochia scoparia</i> (L.) Schrad.	kochia; summer cypress
<i>Polygonum pennsylvanicum</i> L.	penns; smartweed
<i>Setaria faberi</i>	giant foxtail
<i>Sorghum halepense</i> (L.) Pers. (syn. <i>Andropogon halepensis</i> (L.) Brot.)	Johnson grass; barool; baru grass; pangan; yah poeng; Aleppo grass; evergreen millet
<i>Striga asiatica</i> Lour.	witch weed
<i>Xanthium strumarium</i> L. (syn. <i>X. californicum</i> Greene; <i>X. occidentale</i> Bertol.; <i>X. orientale</i> L.)	Noogoora burr; Californian burr; beach cocklebur; beesklits; burweed; kankerroos; rough cocklebur; sheepbur; European cocklebur

## ATTACHMENT 4

### MEMBERSHIP AND TERMS OF REFERENCE OF THE RISK ANALYSIS PANEL

#### Membership

Dr Bill Roberts (Chair)	Chief Plant Protection Officer Office of the Chief Plant Protection Officer Department of Primary Industries and Energy
Dr Bob Ikin	Senior Manager Plant Quarantine Policy Branch, Policy and International Division Australian Quarantine and Inspection Service
Mr Bill Magee	Program Manager, Grain, Animal and Plant Programs Branch Quarantine and Exports Operations Division Australian Quarantine and Inspection Service
Mr Mev Connell	Private Consultant
Professor John Irwin	Professor of Botany University of Queensland

#### Terms of reference

In accordance with the requirements of AQIS's Import Risk Analysis process:

- establish and oversee Technical Working Groups (TWGs) on a needs basis;
- review scientific literature and previous risk analyses to identify quarantine pests that could be in the import pathway consistent with the International Standard for Phytosanitary Measures (ISPM), developed by the Food and Agriculture Organization of the United Nations (FAO);
- assess the potential of these pests to enter, establish and spread in Australia and cause economic damage, including crop losses and loss of export markets;
- consider various risk management options consistent with the Australian government policy, the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) and relevant international standards, including the FAO International Standards for Phytosanitary Measures (ISPMs); and
- make recommendations to the Executive Director, AQIS on appropriate risk management options.

## ATTACHMENT 5

### MEMBERSHIP AND TERMS OF REFERENCE OF TECHNICAL WORKING GROUPS

#### Technical Working Group 1: Disease Risk Analysis

##### Membership

Professor John Irwin (Chair)	Professor of Botany University of Queensland
Dr Sharan Singh	Manager, Grains and Seeds Market Access Plant Quarantine Policy Branch Policy and International Division Australian Quarantine and Inspection Service
Dr Joe Kochman	Principal Plant Pathologist Queensland Department of Primary Industries
Mr Gordon Murray	Plant Pathologist NSW Agriculture

##### Terms of reference

- Identify quarantine diseases associated with imports of maize grain from the USA consistent with the International Standard for Phytosanitary Measures (ISPM), Guidelines for Pest Risk Analysis, developed by the Food and Agriculture Organization of the United Nations (FAO), and in particular assess the potential of these diseases to
  - enter, establish and spread in Australia and,
  - cause economic damage, including crop losses and loss of export markets.
- Consider various risk management options consistent with the Australian government policy, the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) and relevant international standards, including the FAO International Standards for Phytosanitary Measures (ISPMs).
- Liaise on relevant issues with other Technical Working Groups (TWGs) established under the Risk Analysis Panel (RAP) on the import of maize grain from the USA, and other national and international technical experts, as necessary.
- Assess the key disease risks associated with contamination of bulk shipments of maize with seeds of other agricultural plant species such as barley, oat, millet, sorghum, soybean and wheat.
- Report the findings of the working group to the RAP.

## **Technical Working Group 2: Arthropod Pest Risk Analysis**

### **Membership**

Dr Bob Ikin (Chair)	Senior Manager Plant Quarantine Policy Branch Policy and International Division Australian Quarantine and Inspection Service
Dr Jonathan Banks or Dr David Rees	CSIRO
Ms Alison Roach	Professional Officer Plant Quarantine Policy Branch Policy and International Division Australian Quarantine and Inspection Service

### **Terms of reference**

- Identify quarantine arthropod pests associated with imports of maize grain from the USA consistent with the International Standard for Phytosanitary Measures (ISPM), Guidelines for Pest Risk Analysis, developed by the Food and Agriculture Organization of the United Nations (FAO), and in particular assess the potential of these pests to
  - enter, establish and spread in Australia and,
  - cause economic damage, including crop losses and loss of export markets.
- Consider various risk management options consistent with the Australian government policy, the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) and relevant international standards, including the FAO International Standards for Phytosanitary Measures (ISPMs).
- Liaise on relevant issues with other Technical Working Groups (TWGs) established under the Risk Analysis Panel (RAP) on the import of maize grain from the USA, and other national and international technical experts, as necessary.
- Report the findings of the working group to the RAP.

## **Technical Working Group 3: Weed Risk Analysis**

### **Membership**

Dr Bill Roberts (Chair)	Chief Plant Protection Officer Office of the Chief Plant Protection Officer Department of Primary Industries and Energy
Dr Acharee Pheloung	Professional Officer Plant Quarantine Policy Branch Australian Quarantine and Inspection Service
Dr. John Swarbrick	Private Consultant

### **Terms of reference**

- Identify quarantine weeds associated with imports of maize grain from the USA consistent with the International Standard for Phytosanitary Measures (ISPM), Guidelines for Pest Risk Analysis, developed by the Food and Agriculture Organization of the United Nations (FAO), and in particular assess the potential of these weeds to
  - enter, establish and spread in Australia and,
  - cause economic damage, including crop losses and loss of export markets.
- Consider various risk management options consistent with the Australian government policy, the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) and relevant international standards, including the FAO International Standards for Phytosanitary Measures.
- Liaise on relevant issues with other Technical Working Groups (TWGs) established under the Risk Analysis Panel (RAP) on the import of maize grain from the USA, and other national and international technical experts, as necessary.
- Report the findings of the working group to the RAP.

## **Technical Working Group 4: Operational Issues**

### **Membership**

Mr Mev Connell (Chair)	Private Consultant
Mr Bill Magee	Program Manager, Grain Animal and Plant Programs Branch Quarantine and Exports Operations Division Australian Quarantine and Inspection Service
Mr Mike Robbins	Manager/Senior Inspector Technical Services Western Australia Quarantine Inspection Service Australian Quarantine and Inspection Service

### **Terms of reference**

- Identify operational issues relevant to the importation of maize grain from the USA.
- Consider various risk management options consistent with the Australian government policy, the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) and relevant international standards, including the FAO International Standards for Phytosanitary Measures.
- Liaise with other Technical Working Groups (TWGs) and national and international technical experts, as necessary, on relevant issues identified by other TWGs and this working group.
- Develop and assess operational procedures for implementation of management options recommended by other TWGs.
- Report the findings of the working group to the Risk Analysis Panel (RAP).