



*Know-how for Horticulture™*

**Coordinating  
Horticulture's  
response to Codex**

K P Bodnaruk  
AKC Consulting Pty Ltd

Project Number: AH99014

## **AH99014**

This report is published by Horticulture Australia Ltd to pass on information concerning horticultural research and development undertaken for Australian Horticulture.

The research contained in this report was funded by Horticulture Australia Ltd with the financial support of all levy paying industries.

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ISBN 0 7341 0365 4

Published and distributed by:

Horticultural Australia Ltd

Level 1

50 Carrington Street

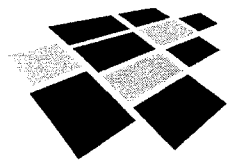
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**COORDINATING HORTICULTURES RESPONSE TO CODEX.**

**Final Report**

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**Purpose of the Project:**

To provide a coordinated response to Codex chemical issues, both nationally and internationally, from within Australian horticulture.

AKC Consulting Pty Ltd acknowledges the funding support provided by the Horticultural Australia Limited for this project.

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## Media Summary

Issues of international trade are increasingly taking on greater prominence for a number of Australian export oriented horticultural crops. This has come about through concerns over the potential for pesticide residue tolerances to act as barriers to trade, i.e., affecting market access in importing countries.

In recognition of the importance of this issue, Horticulture Australia Ltd and the AusHort R&D Committee funded Kevin Bodnaruk to act as the Codex coordinator for horticulture. Through the implementation of the Joint FAO/WHO Food Standards Program, Codex has amongst its responsibilities, the setting of international pesticide tolerances. The World Trade Organization (WTO) accepts these standards as international benchmarks.

In this project, Mr Bodnaruk focused on informing grower organizations regarding any developments, with respect to pesticide tolerances, at the Codex level that might have implications to market access for Australian horticulture. He also liaised with domestic regulatory organizations, including NRA, ANZFA and AFFA to ensure these bodies were fully aware of horticultural industry attitudes in relation to key issues, so that they could adequately represent industry views in the Codex forum.

In addition he liaised with chemical manufacturers with regard to supporting relevant Codex tolerances or the establishment of tolerances for new chemicals relevant to Australian horticulture.

## TECHNICAL SUMMARY

The Codex Alimentarius Commission is a subsidiary body of the FAO and WHO, and implements the UN Food Standards Program. It deals with many aspects of food standards and has assumed greater importance since the World Trade Organization (WTO) decided to use Codex standards as the criteria for acceptability of food in international trade.

Codex standards are used by the WTO as international benchmarks, in dispute resolution and by many countries with little or no regulatory infrastructure, as the basis for their import regulations. The Codex Committee on Pesticide Residues establishes international or Codex Maximum Residue Limits (CXLs) for crop protection chemicals.

Australian horticulture aims to provide 'clean' high quality products to their customers. Crop protection chemicals are often used in achieving this end. A consequence of this use can be chemical residues in the harvested commodity. In Australia, farm chemicals are used in accordance with the local regulatory requirements. Domestic MRLs can often be found to have no CXL equivalent, or to be significantly different.

To develop existing and new export markets CXLs need to be considered by Australian horticulture crops with an export orientation.

Trade barriers based on food safety grounds, e.g., contravention or lack of Codex MRLs, may emerge. Codex requirements could, therefore, have an increasing impact on the ability of Australian horticulture to develop and maintain export markets.

Australian horticulture needs to maintain its reputation and market position by continuing to provide customers with clean high quality product. This could be jeopardised through 'pesticide contamination' incidents.

Over time many crop protection options may be lost, or their value reduced through the development of resistance or the imposition of local use restrictions. The loss, therefore, of Codex MRLs could have very serious effects on horticultural production in Australia through further loss or reduction in crop protection options.

## 1. INTRODUCTION

The Codex Alimentarius Commission (CAC) implements the Joint FAO/WHO Food Standards Program, the purpose of which is to protect the health of consumers and to ensure fair practices in food trade. The CAC adopts three types of standards: 1) commodity standards which define what qualifies as a particular commodity; 2) residue standards, which define acceptable levels of pesticides, veterinary drugs, food additives and contaminants; and 3) codes of practice, guidelines and other recommended measures that assist in achieving the purposes of the Codex Alimentarius such as recommendations of good practices in food production, i.e., of an advisory nature.

Codex standards are significant in international trade due to the importance placed upon them by the World Trade Organization (WTO). An aim of the Uruguay Round of trade talks was to strengthen international rules with regard to dealing with problems of market access through barriers to trade. The issue of non tariff trade barriers were dealt with through the development of the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) Agreements. These agreements placed greater importance on the use of Codex standards as international benchmarks against which national food regulations can be evaluated.

Codex standards are voluntary, and member countries are not obliged to adopt them for national purposes. However, for the purposes of the WTO agreement a standard is now considered adopted when it has been approved by the CAC. As a consequence the standards have become an integral part of the legal framework within which international trade is being facilitated. They have, already, been used as benchmarks in international trade disputes, and it is expected that they will be used increasingly in this regard.

### 1.1 Codex Operation

Australia participates in the various Codex committees. The committees operate on a government-to-government basis. The aim, in part, of this participation is to safeguard Australian interests. Prior to the current project horticulture had not been formally participating in the development of an Australian position with respect to Codex issues.

The Codex Commission consists of 28 committees invested with the responsibility of setting food standards globally. These committees cover aspects of food quality. The Codex Committees are classed as either General Subject Committees or Commodity Committees. General Subject Committee standards apply across the board to all commodity standards. There are nine such committees; General Principles, Food Labelling, Methods of Analysis and Sampling, Food Hygiene, Pesticide Residues, Food Additives and Contaminants, Import/Export Inspection and Certification, Nutrition and Foods for Special Dietary Uses and Residues of Veterinary Drugs in Food. These committees develop all embracing concepts and principles applying to foods in general, specific foods or food groups; endorse or review relevant provisions in Codex commodity standards and, based on the advice of expert scientific bodies, develop major recommendations pertaining to health and food safety.



A review is being undertaken with the intent of streamlining and simplifying existing structures is aimed at improving the procedures for decision-making and acceptance of standards. The goal of the review is to simplify the standards, ensure they are science-based and focus them on safety-related attributes of food products. This review is being undertaken within the context of developing the Medium Term Plan (2003-2007)<sup>1</sup> and to develop a strategic statement of the Commission's view to the future.

Codex standards are developed through an eight-step procedure which provides opportunity for input from countries through comment or the introduction of new data. Time frames can vary from 3 or 4 years from the first introduction until a standard is agreed to 6-8 years if problems are encountered in the process. See Appendix I for a schematic outlining the process for undertaken for the elaboration of standards and related texts.

### **1.2 Codex Committee on Pesticide Residues**

Of specific interest to this project has been the Codex Committee on Pesticide Residues (CCPR). This committee has the responsibility of setting maximum residue limits (MRLs) for Codex (CXLs) for pesticide residues in food commodities. Since its inception the CCPR has set over 2,500 CXLs from approximately 200 pesticides. To assist in the decision-making the CCPR utilizes the Joint Meeting on Pesticide Residues (JMPR), an expert committee, for scientific input on matters relating to risk analysis and the setting of CXLs.

The JMPR has responsibility to evaluate pesticides for possible health hazards arising from the occurrence of pesticide residues in food. The JMPR reviews data pertaining to toxicology, environmental aspects, chemical behaviour, animal metabolism, use patterns and the resulting residues. The JMPR then produces reports within which are contained recommendations to set or withdraw CXLs based upon the data provided.

## **2. METHODOLOGY**

### **2.1 Liaison**

To ensure that an understanding of Codex process could be developed discussions (face-to-face, via telephone and in meetings), with relevant stakeholders in the Codex process were undertaken. This involved:-

- Liaising with regulatory organizations, including NRA, ANZFA and AFFA (who have responsibility for the administration of Australian involvement in Codex), regarding horticultural industry responses to issues arising at CCPR.
- Participation in CCPR Panel Meetings in order to provide input into the Codex process on behalf of Australian horticultural industries.

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<sup>1</sup> See document Alinorm 0141 or found at <http://www.codexalimentarius.net/cac24/alinorm0141/appiie.htm>.

- Liaising with other participants/stakeholders (e.g., State Departments) with regard to issues perceived to be of importance to horticulture in CCPR.
- Liaising with Avcare and individual agrochemical companies in relation to specific Codex issues of relevance to Australian horticulture.
- Liaising with key export horticultural industry spokespersons regarding issues of potential importance arising from CCPR deliberations.

## **2.2 Updates.**

- Providing updates to horticultural industry representatives and industry development officers (IDO's) regarding any proposed CXL changes at CCPR. The purpose of these is to allow industries to assess whether any potential trade issues may arise as a consequence of CCPR decisions.

## **3. RESULTS AND DISCUSSION**

### **3.1 OUTPUTS FROM THE PROJECT.**

#### **3.1.1 PARTICIPATION - AUSTRALIAN CODEX PANEL, CCPR AND CCNSWP.**

Participation in Australian panel discussions in relation to CCPR matters was undertaken. Panel meetings are held in Canberra. Two are held prior to the CCPR meeting to assist in the development of an Australian position on CCPR matters. One panel meeting is held following the CCPR meeting as a debrief. During the project five panel meetings were attended, where Australian horticulture was represented.

CCPR meetings are held annually in Den Haag, Holland. These meetings typically last for six days. The representatives of member countries and observer organizations, e.g., INGO's, discuss proposals for the advancement or deletion of MRLs at these meetings. During the project two such meetings were attended providing input to the Australian delegation.

During the project the regional Codex Committee for the North and South West Pacific was held in Australia, Perth. These meetings are held biennially with the venue rotating amongst members. Countries participating were Australia, Canada, New Zealand, USA, Tonga, PNG and Samoa. Regional committees cover a broad range of issues relevant to the setting of Codex standards. At this meeting the issue of trade vulnerability was raised and discussed (see 3.1.4).

#### **3.1.2 COMMUNICATION ACTIVITIES.**

It was identified in the Final Report of Project AH990012 that an objective of this project should be to keep Australian horticultural industries informed of new developments and the progress of existing Codex issues. This was to ensure that industry requirements were identified and adequately presented to regulatory authorities and that existing MRLs are not deleted or altered without appropriate industry input.

To achieve this objective various communication activities were undertaken during the life of the project. These consisted of direct consultation with industry representatives, participating in industry meetings (QFVG Responsible Pesticide Use Group, Pest Forum), making presentations at industry meetings (AusHort, Vegetable R&D Meeting and HMAC) and providing written updates on issues arising at Codex. The updates were circulated to various industry contacts, e.g., Industry Development Officers and peak industry body representatives.

### **3.1.3 MAINTENANCE OF CODEX MRLS (DATA GENERATION)**

As a consequence of communication activities two subsequent HAL projects have been initiated. The objective of these projects is to generate supporting residue data to retain existing Codex MRLs. These are for dimethoate in capsicums (HAL Project VG00097) and carbendazim in mangoes (HAL Project FR00044). In both instances the existing Codex MRL was recommended for deletion unless supporting residue data was provided. After consultation with industry it was decided to initiate project work to generate this data for submission to Codex. This was, in part due to the Australian use pattern being relatively unique. Chemical manufacturer investment in both projects was negotiated.

Third party consultants are undertaking the field trial work. The writing of protocols, final reports and regulatory liaison is the responsibility of the Codex Coordinator.

### **3.1.4 MARKET ACCESS ISSUES - TRADE VULNERABILITY.**

A delay in establishing CXLs for new pesticides has been identified as potentially creating a situation of trade vulnerability. This occurs where new pesticides gain approval in a few limited member countries prior to Codex nomination. When this situation occurs the risk of residue violations occurring increases as there is no international MRL coverage available. The lack of CXLs could therefore, have significant market access implications as many countries reference CXLs in the absence of domestic MRLs.

It would therefore be in horticulture's best interests if the current Codex system could be revised to either overcome or reduce the time lag effect in Codex MRL setting. An output of this project has been the development and circulation of a discussion paper identifying the degree of trade vulnerability existing for Australian horticulture. This paper was used in developing the Australian position at CCPR.

### **3.1.5 ACUTE DIETARY INTAKE**

An outcome of the project has been the identification of acute dietary intake assessment methodology as having potentially serious implications for horticultural industries. Acute dietary intake has recently been added to the risk assessment procedures relating to the registration and review of pesticide uses in Australia. If assessments indicate the possibility that exposures may exceed the acute reference dose (ARfD) then the MRL for the pesticide use in question will not be promulgated. In the case of reviews, existing registered uses and corresponding MRLs would be withdrawn. This can have potentially significant implications for Australian horticulture, particularly in the area of chemical review where uses may be lost as a consequence of the calculations.

The cause for concern, with the implementation of this approach, is that the methodology is relatively new, is still being refined and is highly conservative, i.e., assumes a worse-case scenario at every level of assessment. Consequently there is a real risk that if the methodology is applied without recognition of its limitations valuable pesticide uses may be needlessly lost.

In response to this issue, a HAL workshop has been proposed. The objective of the workshop is to bring together the risk assessors and managers with industry groups potentially affected by this process. It is hoped that the workshop will provide an opportunity for information sharing and the development of a dialogue between the various groups resulting in the progression towards a balanced approach of risk analysis.

### **3.2 CODEX ISSUES REQUIRING FUTURE CONSIDERATION**

#### **3.2.1 REGULATORY CAPTURE**

Concerns are being expressed that with Codex standards being incorporated into WTO there is an increased danger that member organizations will attempt to use standards for driving food policy or for industrial promotion.

The issue of industrial promotion can relate to the setting of standards reflecting a regional bias, e.g., standards set associated with the production process but not necessarily with any bearing to food safety. An example of this is the Codex standards for mineral water where water is to bottled at the source. These standards reflect a European bias potentially disadvantaging US and Japanese mineral water producers where water can be either piped or transported to the bottling plant.

A further concern is the potential for countries to use the process of international standard setting to promote their specific views on food policy. An example of this has been the promotion of the precautionary principle by the European Union<sup>1</sup>.

The precautionary principle is a concept which imposes precaution as an essential element in the decision making process when assessing risk management options. The two key aspects are the degree of scientific uncertainty in assessing the possibility of risk and the chosen level of protection. Concerns over the application of the precautionary principle primarily relate to the latter aspect, where the level of protection chosen could effectively result in barriers to trade.

#### **3.2.2 HARMONIZATION**

Article 3 of the SPS Agreement<sup>2</sup> stipulates that although members can adopt a measure to provide a higher level of health or environmental protection than that provided by an existing international standard, scientific evidence must support that claim.

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<sup>1</sup> See Communication on the precautionary principle, COM (2000) 1. European Commission

<sup>2</sup> See WTO Agreement on the Application of Sanitary and Phytosanitary Measures. 1994.

Concerns are being expressed that this may have the potential to drive standards downward, i.e., to the lowest common denominator. This may result in Codex standards being used to facilitate trade at the cost of lowered consumer protection and to the disadvantage of domestic producers meeting stricter national standards.

### **3.2.3 OTHER LIMITING FACTORS**

The legitimacy of factors other than science, i.e., socio-economic and cultural factors, have been raised at Codex with regard to standard setting. Some countries and INGO's, such as Consumers International, have argued that economic and social factors should be taken into account. To them decisions taken on the basis of purely scientific considerations are not deemed acceptable. These groups are also strong proponents of the precautionary principle.

Giving consideration to ethical, cultural or moral arguments could create extreme problems for the international standard setting process. Cultural or ethical arguments could potentially be used to cover a wide range of exemptions to free trade. A lenient interpretation of the TBT agreement in this area could provide the opportunity for countries to develop a myriad of new barriers to trade.

## **4. CONCLUSION**

Codex standards have assumed greater prominence in the international trade in food due to WTO utilization of the standards as benchmarks. Furthermore, the standards can be significant to Australian horticultural exporters as a number of the current trading partners, e.g., Japan and the majority of other Asian countries, tend to utilize Codex standards with respect to import requirements.

In order to maintain its reputation and market position Australian horticulture needs to continue to provide customers with clean high quality product. An element of this strategy is the maintenance of an understanding and awareness of issues related to Codex standard setting. This is best achieved through participation in the various Codex fora.

## **5. RECOMMENDATIONS**

- A. That the role of the coordinator be broadened to include a 'watching brief' over other Codex committees of importance to horticultural industries, e.g., Food Hygiene, Food labelling and Fresh Fruit and Vegetables.
- B. That Australian horticultural industries need to increase liaison with the chemical industry to identify priority compounds and uses for Codex nomination.
- C. That the role of the coordinator be combined with that of the ECRP coordinator.

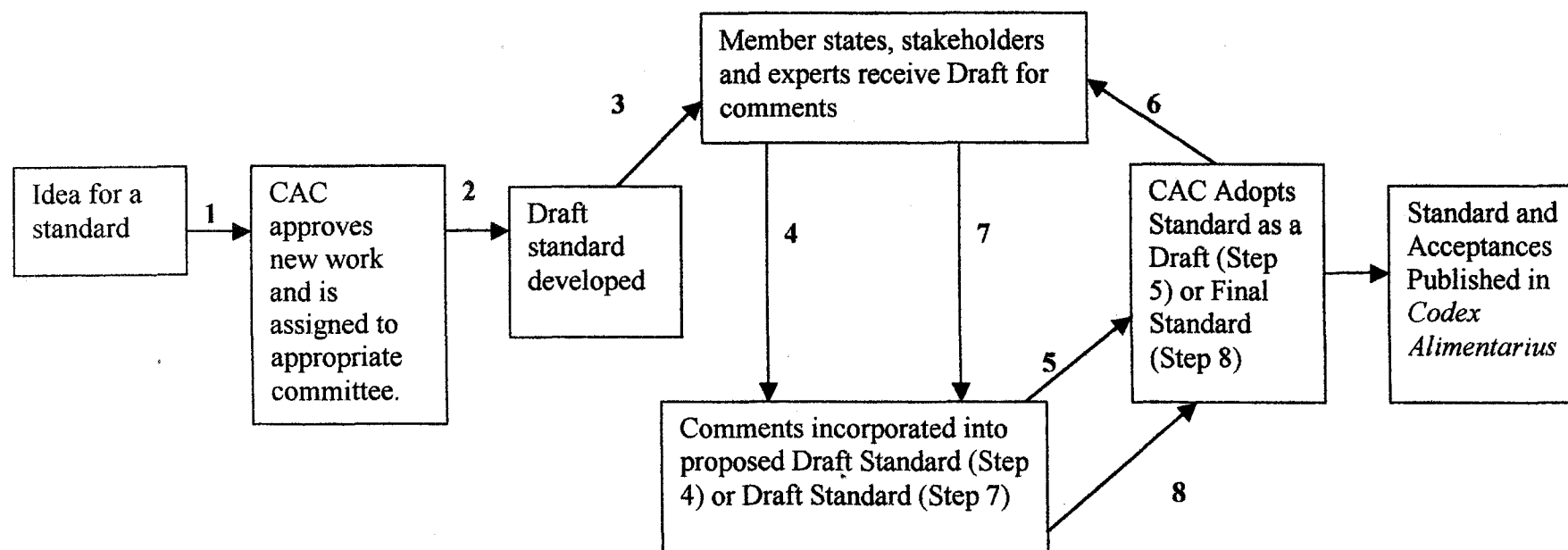
## 6. RELEVANT PUBLICATIONS

- Anon. (1998). Strategic objectives for Australia's interests in Codex 1998-2002. National Codex Committee.**
- Anon. (1999). Understanding The Codex Alimentarius. FAO/WHO**
- Anon. (2000). Communication from the Commission on the precautionary principle, COM (2000) 1. European Commission**
- Anon. (1994) WTO Agreement on the Application of Sanitary and Phytosanitary Measures.**

## APPENDIX II GLOSSARY OF ABBREVIATIONS

AFFA	Department of Agriculture, Fisheries and Forestry – Australia
ANZFA	Australia New Zealand Food Authority
ARfD	Acute Reference Dose
CAC	Codex Alimentarius Commission
CCPR	Codex Committee on Pesticide Residues
CXL	Codex MRLs
ECRP	Existing Chemical Review Program
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
HAL	Horticulture Australia Limited
HMAC	Horticulture Market Access Committee
IDO	Industry Development Officer
INGO	International Non Government Organization
JMPR	Joint Meeting on Pesticide Residues
MRL	Maximum Residue Limit
NRA	National Registration Authority for Agricultural and Veterinary Chemicals
QFVG	Queensland Fruit and Vegetable Growers
SPS	WTO Agreement on the Application of Sanitary and Phytosanitary measures
TBT	WTO Agreement on Technical Trade Barriers
WHO	World Health Organization of the United Nations
WTO	World Trade Organization of the United Nations

## APPENDIX I: Codex procedure for elaboration of standards and related texts.



Codex texts are developed through an eight-step procedure.

Step 1. The work is assigned once there is demonstrated justification for a particular issue to be progressed.

Step 2. The Codex Secretariat arranges for the preparation of a proposed draft. This is done by either the Secretariat, by a member country or an expert.

Step 3. The proposed Draft is circulated to stakeholders (member countries, international non-government organizations) for comment.

Step 4. Comments are forwarded to the responsible committee for consideration and the proposed draft amended accordingly.

Step 5. The proposed Draft is forwarded to the Commission for adoption at Step 5 – this gives the text the status of “draft” standard.

Step 6. The draft text is again circulated to stakeholders for comment.

Step 7. Comments received and reviewed by the responsible committee.

Step 8. The agreed draft text is forwarded to the commission for adoption as a final standard and forwarded to member countries for acceptance.