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SENATE

RURAL AND REGIONAL AFFAIRS AND TRANSPORT LEGISLATION COMMITTEE

Reference: Citrus canker outbreak

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SENATE

RURAL AND REGIONAL AFFAIRS AND TRANSPORT LEGISLATION COMMITTEE

Wednesday, 14 September 2005

Members: Senator Heffernan (Chair), Senators Ferris, McEwen, McGauran Milne and Sterle

Participating members: Senators Abetz, Adams, Allison, Bartlett, Mark Bishop, Boswell, Brandis, Bob Brown, George Campbell, Carr, Chapman, Coonan, Crossin, Eggleston, Chris Evans, Faulkner, Ferguson, Fielding, Hogg, Hutchins, Lightfoot, Ludwig, Lundy, Sandy Macdonald, Mason, McLucas, Nash, Nettle, O'Brien, Payne, Robert Ray, Santoro, Siewert, Stephens, Trood, Watson and Webber

Senators in attendance: Senators Ferris, Heffernan, McEwen, Milne and Sterle

Terms of reference for the inquiry:

To inquire into and report on:

The Department of Agriculture, Fisheries and Forestry's administration of the citrus canker invasion with particular reference to:

- 1) AQIS' response to the allegations of illegal importation of plant material;
- 2) The adoption of the quarantine protocols and management of the emergency response;
- 3) Cooperation between the Commonwealth and States, including funding issues;
- 4) The impact of the incursion on the Australian citrus industry;
- 5) Prevention and management of future incursions; and
- 6) Other related matters.

WITNESSES

BARKLEY, Mrs Patricia, Technical Advisor, Australian Citrus Growers Inc1
BURROWS, Mrs Leonie Elizabeth, Acting Chief Executive, Australian Citrus Growers Inc1
PRESSLER, Mr Craig Robert, Private capacity

Committee met at 4.03 pm

BARKLEY, Mrs Patricia, Technical Advisor, Australian Citrus Growers Inc.

BURROWS, Mrs Leonie Elizabeth, Acting Chief Executive, Australian Citrus Growers Inc.

PRESSLER, Mr Craig Robert, Private capacity

CHAIR (Senator Heffernan)—I declare open this public hearing of the Senate Rural and Regional Affairs and Transport Legislation Committee. The committee is hearing evidence on the committee's inquiry into the Department of Agriculture, Fisheries and Forestry's administration of the citrus canker outbreak. I welcome everyone here today. This is a public hearing and a *Hansard* transcript of the proceedings is being made. The committee has authorised the recording, broadcasting and rebroadcasting of these proceedings in accordance with the rules contained in the order of the Senate of 23 August 1990 concerning the broadcasting of committee proceedings. Before the committee starts taking evidence I place on record that all witnesses are protected by parliamentary privilege with respect to submissions made to the committee and evidence given. I remind witnesses that parliamentary privilege does not extend to statements repeated outside the committee's proceedings. Any act by any person which may disadvantage a witnesses on account of evidence given by him or her during the Senate or a Senate committee is a breach of privilege.

While the committee prefers to hear all evidence in public, the committee may agree to take evidence confidentially. If the committee takes confidential evidence it may still publish or present all or part of that evidence to the Senate at a later date. The Senate also has the power to order the production and/or publication of confidential evidence. The committee would consult the person whose evidence the committee is considering publishing before taking such action. Can I indicate, as we have done at each of these hearings, that it is the committee's intention to seek the facts relating to this inquiry and not to apportion blame. The committee has had the cooperation of both the Commonwealth and states in an effort to do so.

I welcome the Australian Citrus Growers. If you would like to make an opening statement, we would be delighted.

Mrs Burrows—Australian Citrus Growers was established in 1948 as the national peak body of the Australian citrus industry. We comprise nine grower organisations and three statutory citrus authorities, and we represent around 2½ thousand commercial citrus growers. The citrus industry is Australia's largest fresh fruit exporting industry, with citrus exports valued at around \$153 million in 2004. Last Friday, Australian Citrus Growers voted to implement a biosecurity levy for the citrus industry, and we signed the Australian Emergency Plant Pest Response Deed.

The issues of how canker appeared at Evergreen Farms have been addressed in other forums, but what has been highlighted is the need for transparency of process and improved communication in the event of emergency plant pest management activities. The confidential deed of agreement with Evergreen Farms caused suspicion and wariness amongst growers and others involved in the process.

ACG has addressed the issue of the early need for an immediate total eradication of citrus canker. The Pressler plan, which had Emerald grower and industry support, could have achieved this. There will no doubt be questions of Pat Barkley on the technical and scientific aspects of total eradication versus the cookie cutter approach, but the refusal of the eradication plan by the government has highlighted the need for a stronger framework for emergency management of plant pests, with legislation that is applicable to all jurisdictions in Australia. In refusing the plan at a total cost of around \$16 million, it seems that they felt there was a compensation factor involved, and no legislation was in place to cover this. The likely cost of the current Emerald eradication is now around \$19½ million, and this excludes the new limited compensation package.

The failure of the cookie cutter approach and the failure to acknowledge that it was not working have meant that the threat of the spread of the disease, both in Emerald and in the wider industry, has been extended. It has meant market lockouts and growers facing ruin. It has also meant that, until the announcement of the recent very limited compensation package, growers have had their trees destroyed without compensation. It has certainly highlighted too that there need to be mechanisms within the management programs to consider the social and economic impact on growers and the broader community. I am not sure that, aside from grower reimbursement, the Emergency Plant Pest Response Deed can really address this issue either.

Australian Citrus Growers has been very concerned about the communication processes within the management program of the Emerald outbreak. Of particular concern was the perceived level of communication with affected growers. Strict confidentiality guidelines were in place which would have precluded proper communication with growers, although the then Queensland minister was issuing media

releases about decisions made at meetings. While it has been acknowledged that this was new territory for everybody in all the jurisdictions involved, the industry felt that communication processes between Queensland DPI and the Emerald growers were both divisive and non-realistic. The QDPI decision to proceed towards gaining domestic market access was unrealistic and unnecessarily extended the pain of the Emerald growers. Three more outbreaks were found while the market access PRA was proceeding. The unfortunate consequence of the canker outbreak would be that there is little incentive for growers to report suspected outbreaks of diseases and pests. The implications of this for Australia's quarantine services and for industries are enormous.

In our written submission we have addressed some of the effects on the wider citrus industry which have been very detrimental. On a slightly more positive note, the issues of Emerald certainly raised awareness throughout the industry of the need for proper on-farm biosecurity measures to be developed and implemented. By signing the Emergency Plant Pest Response Deed and gaining industry support for the raising of a potential biosecurity levy as a mechanism to fund the industry contribution to future plant pest outbreaks, ACG can address some of the concerns that we have had with the management of the Emerald citrus canker incursion. These will include mechanisms for realistic grower reimbursement and mechanisms for real industry involvement in the management program. There should be a much clearer management framework, and hopefully there will be a partnership approach between industry, government and the wider community as a means of achieving the objectives of quarantine.

CHAIR—Thank you. Why do you think the experts thought the Florida protocol would work?

Mrs Barkley—It was based on research that was done in Florida by a well-respected scientist. The previous approach for eradication in most places around the world, whether Brazil or Florida previously, had been just to remove trees to about 125 feet around an infected tree. They knew that this did not work so the study had been done, admittedly in Miami in backyard trees, to see the distance of spread. They believed that, by going out about 600 metres, 1,900 feet, this would get 95 per cent of trees that had been infected from the original source.

CHAIR—What would be the point of getting 95 per cent?

Mrs Barkley—Ninety-five per cent is not as good as 100 per cent, is it?

CHAIR—It is pointless, isn't it? If you are trying to stop the thing, you really have to get 100 per cent.

Mrs Barkley—Yes.

CHAIR—So is there a distance at which they say it is 100 per cent?

Mrs Barkley—They would have had to go out a much greater distance than that.

CHAIR—It is alleged to have spread 7½ kilometres from 2PH to Evergreen. Did you know at the time what the Florida protocol was and its failure rate in Florida?

Mrs Barkley—At the time the outbreak occurred it probably seemed the best option when the infection was just at Evergreen. The doubts came when it was subsequently found at several places on IP2.

CHAIR—Reading your brief the infection can live—

Mrs Barkley—In infected trees, yes.

CHAIR—Is it a reasonable assumption that what is going to happen now up there will remove every tree?

Mrs Barkley—Remove all the infection?

CHAIR—Every tree though. How are they going to overcome the human failure? The committee's understanding of the infection at Evergreen was that when they brought the gentleman out from Florida he said, 'The place is rotten from one end to the other,' and hopped on the plane and went back. His assumption was that it had been there for a long time. How are growers in the district going to be confident that, if they go to the trouble of replanting an orchard, given that it is at a very mature stage, there could be a tree or two behind a gum tree somewhere, and it could be still about? How do you overcome that even under the present arrangements?

Mrs Barkley—It is hoped that every citrus tree whether backyard or on grower properties will be removed. The worry is more the native desert lime, *Citrus glauca*, which—

CHAIR—Like the feral pig in foot and mouth. So how can we have confidence that if you have borne the expense and the trauma of what has happened and then go to the trouble of replanting it—

Mrs Barkley—The scientific advisory panel and the consultative committee have addressed this in great detail in the last few weeks. I have been overseas so I have not been privy to some of what has occurred. Basically, the idea is to go out—and I cannot tell you the exact distances because I was not there—to a greater distance from Evergreen and a lesser distance from other infected properties and then continue surveillance. To date there has not been any canker found in *Citrus glauca* surrounding any of the properties.

CHAIR—And the incubation period can be 18 months?

Mrs Barkley—It can be. Florida suggests anywhere between four and 18 months for you to be able to pick up good symptoms.

CHAIR—Finally, because I do not want to take up too much time: with the citrus canker that was found down at the Brisbane markets, I presume they were regular senders of fruit. It would be reasonable to assume that there was citrus canker sent to the markets the week before, and that might be a delirious assumption on my part, but if it was and those canker mandarins went to Bullamakanka, do they carry a risk of infection?

Mrs Barkley—Yes, there is a possible risk, but you have to have fruit actually coming into contact with a citrus tree that has the foliage or fruit at a susceptible stage. If somebody had their compost heap under their tree and the foliage was susceptible and there was adequate rainfall et cetera, there is a theoretical possibility that you could get infection occurring, but you have to have that linkage between the host and the pathogen.

CHAIR—Most people agree with the so-called Pressler plan—is that a fair assumption?

Mrs Burrows—Yes.

CHAIR—We have associated the industry with being not as well organised as it might have been by government, both state and federal. Do you think the reason it did not actually happen was a vagueness over who was going to pay for it?

Mrs Burrows—Yes.

Senator STERLE—In your submission, on page 5, you indicate that in November-December 2004 there was general acceptance to re-examine the Pressler proposal. Can you shed any light on why it was not adopted for another six months?

Mrs Barkley—The major reasons were probably the cost factor and the perceived compensation factor. This was not the first time total eradication had been proposed for citrus canker in Australia. Back in the early 1900s there was a lot of canker in the Northern Territory. They tried eradication of just individual trees, and it did not work. So, back in about 1920 they eradicated all citrus trees in the Northern Territory down to the 19th parallel. Here was an example of where we had done it before very successfully, because we did not see canker until a new outbreak in the 1990s. To the citrus industry it was a definite possibility. If you get rid of the host you do not have a problem, because you have broken the disease triangle. It is like with a bushfire: if you get rid of all the combustible material, you do not have a bushfire. The same thing applies to diseases.

Senator STERLE—So, being an expert after the event, the industry was aware of what had happened in the Northern Territory and how it was eradicated—

Mrs Barkley—Yes.

Senator STERLE—and yet still did not do it. I know there was a cost factor and all that, but what does it cost now? That is not a cheap shot. The argument for what it has cost your industry or, more importantly, the growers in Emerald now—

Mrs Burrows—Yes, but the industry was supporting the Pressler plan right through.

Senator STERLE—But the Pressler plan did not involve total eradication.

Mrs Burrows—Yes.

Mrs Barkley—And it includes native vegetation out to seven kilometres.

CHAIR—Does there need to be greater definition? One of the things that we have struggled with is that the Commonwealth imposes the quarantine and the state supervises it. I have to say, we thought it was pretty haphazard, given that we still have the capacity to drive in there and load the ute up with mandarins and not see a sign that says it is under quarantine. Do you think that we need to give some direction to both state and Commonwealth government on clearer lines of authority in supervising this? This breaking up of responsibilities between state and federal gives everyone a chance to blame the other one. Did that happen?

Mrs Burrows—It did not happen, but I think there needs to be a much better governance framework in terms of managing these emergency plant pest responses, yes. It has been a legislative issue, I think.

CHAIR—When the Pressler plan was put up, who knocked it over—the consultative committee?

Mrs Barkley—Initially QDPI had a situation paper comparing the present cookie cutter approach with the Pressler plan. We as an industry put it up to the CCEPP. The CCEPP never really considered it—it was not really put up for discussion by the scientific advisory panel or the CCEPP in great detail.

Senator McEWEN—Can you—and this is probably for Mrs Burrows—tell us what you think the impact was of the delay in implementing the eradication program?

Mrs Burrows—I think the growers lost another 12 months in the process. There was uncertainty throughout the whole industry, which was affecting both domestic markets and to a certain extent export markets. It just drew everything out probably close to another 12 months.

CHAIR—I do not want to put the poor bugger in, but the manager of one of the farms up there simply did not know what it looked like—he did not know what he was looking for. Is that an issue—that people did not really know what it looked like? This particular bloke said the only reason he discovered it was that he pulled out a pamphlet from the back of the plane and thought, 'Oh, my God, that's what we've got at home.'

Mrs Burrows—I think that relates to the communication processes, which were not good right through—particularly with the growers and probably QDPI, because they were the people dealing with the growers. The whole communication process needed improvement.

CHAIR—When we went to Emerald we landed at the airport and there was a sign at the airport saying 'Quarantine Area'. But we wheeled into a farm on the way into town and there was no indication that the farm was under quarantine, even though it was. Is that something that other people have observed? The quarantine area does not seem to be well documented.

Mrs Barkley—I visited Evergreen just after the outbreak there and certainly there were signs up, foot baths and prevention of people moving onto the property et cetera. It was the same thing when it was on the IP2. But in terms of huge signs around the whole of the property, probably no.

CHAIR—But we went to a farm which is obviously going to lose all its trees, and there was no footpath, there was no sign, there was nothing that said: 'Don't come in here and load your truck up with fruit and go to Melbourne.' There was no signage at all. That was one of the two or three largest farms in the district.

Mrs Barkley—That has been one of the areas that has been of concern to the Australian Citrus Growers—the potential of movement of fruit out of the area. There was a report of one instance of fruit being stolen and going into an itinerant's boot. The movement of workers from the area to other areas has also been a concern. There is a lot of conflict in some of the scientific literature as to how long the bacterium will survive on clothing or inanimate objects. The more recent literature from Florida suggests that it is something like 72 hours, but if you go back to some of the very early literature, where they just dipped a cloth into a bacterial suspension of canker, the canker could still be detected five weeks later. So things like picking gloves and any sort of picking equipment may be a risk.

CHAIR—And especially teams going from one farm to the other.

Mrs Burrows—Yes, and they do. They move south.

CHAIR—Does a bit of Solvol or Lux get rid of it?

Mrs Barkley—Bleach is a good thing if you want to use something like that.

CHAIR—How easy is it to detect for the average punter—have they got any chance of picking it up?

Mrs Barkley—If you have your eye in, you can detect it just on visual symptomatology but that can be misleading. I could show you some leaves that have had herbicide injury and they would not look all that dissimilar, for example.

CHAIR—So, according to your submission—that Florida has found that the highest accuracy of detection is 107 days after infection—that would suggest it is not easy to detect.

Mrs Barkley—No. When it is there at subclinical levels, it is very difficult to detect. When I went to IP2 and looked at the first outbreak on IP2, there were trees that were signalled as being ones that were infected; I went round and round those trees and I had difficulty finding it, because there were just one or two little lesions present.

CHAIR—The difficulty with all this stuff is human failure—or, in my case, failing eyesight! We were given some evidence by a former manager of Evergreen that, when he left the farm, which was six weeks before they went into quarantine, for some reason or another he got an agronomist to go out there and walk around the place and say that there was no citrus canker on the place. Yet, six weeks later, they were put into quarantine, and that gentleman came out from America, had a look and said that the place was rotten with it and got on the plane and went back. It would not be unreasonable for us to assume that the agronomist got it wrong, would it?

Mrs Barkley—I went and had a look at Evergreen, as I said. On the Cara Cara navel orange block, which was one of the worst affected blocks on the property, the spring flush showed virtually no symptoms at all. The summer flush was like a bushfire—it was just lousy with spots and the leaves were starting to fall off. The next flush after that, which was the late autumn flush, was again showing no symptoms. So this was where you had had the infection period at the right time when the leaves were susceptible. But, in one of the epidemiological reports done on Evergreen, the person who did it found what he believes was a canker lesion on very old wood, and that would have dated back to several years before the infection that occurred in 2004.

CHAIR—Could that possibly mean that people knew it was there for a long while before they owned up?

Mrs Barkley—They might not have recognised the symptoms. There was another block on Evergreen, a much younger block of miscellaneous material of only young trees, two or three feet high. As I said, it was basically a fruit salad block of citrus, and nearly all the varieties had symptoms and some of those were on the trunks, suggesting that it had probably been present in the nursery.

CHAIR—When was your first association with Evergreen? Did you go there in 2001 or—

Mrs Barkley—I visited Evergreen on 22 February 2001. At the time, I was the National Citrus Improvement Manager for Auscitrus, which supplies bud wood to the citrus industry, and Evergreen got a huge amount of bud wood from Auscitrus. In company with Bruce McRae from 2PH Farms and Wayne Parr, who is the nurseryman from Torbanlea and also a director of Auscitrus, I visited Evergreen and we walked through the nursery and looked quite closely at the nursery. There was nothing there to suggest that there were symptoms of canker at that time. We did not inspect the field trees; we just drove around, basically. But we did walk through the nursery and spent some time there.

CHAIR—Would that have been around the time of the alleged importation?

Mrs Barkley—It was probably three or four months later on from when, I gather, the alleged importation was. Remember that the alleged imported variety was Ponkan mandarin. Ponkan mandarin, the scientific literature suggests, particularly the literature from Japan, is quite resistant. In other words, it is not going to show all the beautiful symptoms that occurred on the Cara Cara navel, for example. In some ways, it could act as a Typhoid Mary, because it could be there at subclinical levels or epiphytically. If it was illegally introduced, it would not be treated with methyl bromide or chlorine as it would be if it came through in legal ways.

CHAIR—Allegedly, it did come from somewhere in China. Is it prevalent in where it came from in China?

Mrs Barkley—Yes. I was in China a couple of weeks ago. In all the areas of coastal China, including Guangdong, Fujian and Jiangxi provinces, that canker exists all the time. It is quite prevalent.

CHAIR—So how do they deal with it?

Mrs Barkley—They live with it, like people do in most of South-East Asia.

CHAIR—It seems a terrible shame. As for the variety of citrus canker that is up there, have you got any expert knowledge of the strain and where it might have come from?

Mrs Barkley—Canker A, which is what this one is, is the major form of citrus canker that occurs around the world. There are a couple of other forms which have been actually separated taxonomically in the last few weeks. Canker A is widespread in South-East Asia and in China and India.

CHAIR—So if it is true that there was an illegal importation or an importation of some other kind from China, it would be the same variety of citrus canker if that were the case?

Mrs Barkley—Yes. There is a little bit of variability in citrus canker A. For example, in Florida they have found a couple of anomalies in terms of the strain, so you can differentiate—the Manatee strain in Florida is different from the Miami strain, which is different from the A* or AW strains.

CHAIR—Would it be fair to say that the strain is more aligned with the Chinese one than the Florida one?

Mrs Barkley—No. The person who did the work in Australia in identifying citrus canker is Deborah Hailstones from New South Wales Agriculture but there was also some identification work done by Jim Graham of the University of Florida at Lake Alfred. They believe that the canker from Emerald is like the Manatee strain that occurs in Florida. That Manatee strain also occurs in Malaysia and China.

Senator McEWEN—Can you give us an opinion as to whether citrus canker can survive extremes of temperature? Can it survive refrigeration?

Mrs Barkley—It can probably survive refrigeration because if you keep samples in the fridge you can go back to them some time later. As for extremes of temperature, it depends what it is present in—say, leaf tissue or bark. Often if it is in bark it might survive for a longer period of time than it would if it were in a leaf that is going to senesce more readily. In terms of the development of canker, it is often a disease of more tropical areas, like Darwin, where we found it, the Torres Strait Islands and South-East Asia. A guy who worked in the very early days on where it occurs around the world said it can occur anywhere where citrus is grown. It is less likely to occur in more arid areas, like Mildura, because the climatic conditions are not as favourable.

Senator McEWEN—Has it been found outside the PQA?

Mrs Barkley—No.

Senator McEWEN—Is it still the case that it has not been found?

Mrs Barkley—Yes.

Senator McEWEN—What has happened about the removal of *Citrus glauca* from the area in and around Emerald?

Mrs Burrows—That will be proceeding. The national management group are considering that. They have now got an eradication protocol in place. I think it is 1,200 metres around Evergreen and 600 metres around the others.

CHAIR—What is the percentile there?

Mrs Burrows—I do not think they know. I do not think they know yet how many citrus glauca trees are there at this stage—that is my understanding.

Mrs Barkley—They are often scrubby little things that are apparently hidden by grass.

CHAIR—But if they are 1,201 metres outside, what is the go?

Mrs Barkley—Presumably, they would stay but I do not think there would be that degree of—

CHAIR—Take 1,200 or 1,300 metres. What is so special about 1,200 and what percentile does that deliver to the risk?

Mrs Barkley—A paper produced by Dr Rob Allen at QDPI looked at some of the infection statistics and what was required for eradication. I think it was partly on the basis of that approach that the CCEPP have come to the conclusion that these figures should be used.

CHAIR—So if they do it and it does not work, will he get the sack?

Mrs Barkley—He is a consultant, too.

Senator McEWEN—Is any citrus being taken out of the Emerald area now for either domestic or export purposes?

Mrs Burrows—From my understanding, there are still some Murcotts going to export. They have always been able to export some of those fruit to some countries. Certainly, there is not supposed to be anything coming onto the domestic market.

Senator McEWEN—Not legitimately.

CHAIR—When you export, do they seal the container in Emerald?

Mrs Burrows—I am not sure.

Mrs Barkley—You should be asking Craig.

CHAIR—I would be very assured. Do they seal it?

Mr Pressler—Yes, they do. Under DPI supervision, they all leave with a seal.

Senator McEWEN—Do you have any update on the final cost of the outbreak to the growers of Emerald?

Mrs Burrows—Not on the final cost to growers, but the final cost of the eradication program was presented to CCEPP last week and I think it was around \$19.5 million. You can multiply that by many millions to see what the loss to the growers would be.

CHAIR—One of the great curiosities for this committee is that there was an outbreak in 2004 which may well have been there during the supervising period. After the court case, the quarantine was reinforced and they came to a confidential agreement on supervision. It seems to me that during that 18-month supervision there was a fair likelihood that there was citrus canker there that was not detected. Then we discovered that back in 2001, when a whistleblower blew the whistle, a compliance officer did his job and handed up a brief to the DPP which did not have anything in it. Officially, the answer was there was not enough evidence—and that was because they did not bother to interview the manager of the farm, the people in the nursery et cetera. Did they interview you, Mrs Barkley?

Mrs Barkley—I spoke to Vanessa Brake, who did the raid on Evergreen.

CHAIR—Were you there on that day?

Mrs Barkley—No, I was not on the raid. I was present at Eastern Creek, the plant quarantine station, when the samples arrived there.

CHAIR—That is interesting. Were there two lots of samples or one?

Mrs Barkley—I think a second lot came down, but I did not see them. I saw the first lot.

CHAIR—What happened to the first lot? Did a lot of them die?

Mrs Barkley—No, not as far as I know. You would need to check with the people at the plant quarantine station. There were two different lots of labels on the plants: one said 'Imperial mandarin' and the other said 'Imperial mandarin 1A', as I recall. There had been a suspicion that the alleged illegal material was Ponkan mandarin. Emperor mandarin, which we used to grow many years ago as a commercial variety—and it still grows occasionally in backyards—is believed to be a seedling of Ponkan mandarin. I went to Eastern Creek armed with two samples: one was definitely Imperial mandarin and one was definitely Emperor mandarin. They fitted quite closely with the two lots of trees.

CHAIR—Where did you get the Ponkan mandarins out from?

Mrs Barkley—No, I said Emperor mandarin. But Ponkan had been brought as seed into Australia on a number of occasions. I brought it in back in the late sixties from the Philippines, we brought some in from China in the early 1990s and we also brought some seed of Ponkan from Florida. So we had sources within the New South Wales agriculture department of Ponkan mandarin derived from seed, but that material was not commercially available.

CHAIR—Did you follow the growth of those trees at Eastern Creek? Were they in little pots or big pots, or cuttings?

Mrs Barkley—Because of being outside the government departments it was not possible to go and visit places like Eastern Creek and just walk in. But I was subsequently sent some photographs of the fruits that were on those trees and certainly to me they looked like Emperor or Ponkan mandarin. But at the time the samples arrived at Eastern Creek I had said, and conveyed by letter, to Vanessa Brake that they needed to check with Steve Sykes of CSIRO and ask him to run isozyme analyses on the samples to see if they fitted with being Ponkan or Emperor mandarins.

CHAIR—They did that, did they?

Mrs Barkley—That is what I believe is the case.

CHAIR—What did they discover?

Mrs Barkley—You need to check with Steve Sykes, but my understanding is that the isozyme analysis fitted with belonging to Ponkan or Emperor—but you cannot tell the difference between Ponkan and Emperor because of one being a seedling of the other.

CHAIR—How long after the day of the raid were you next at the farm, at Evergreen?

Mrs Barkley—Not until there was some canker found. I was not there in the in-between period. I have only ever been to Evergreen twice.

CHAIR—We were a bit fascinated, I suppose you could say, with the fact that during the original investigation on which the DPP made the judgment that there was not enough evidence—which was probably

a reasonable conclusion given that there was bugger-all evidence anyhow—they had forgotten or could not get agreement or something went wrong so that they did not interview the manager, who eventually became the whistleblower, and the nursery people and the bug people and the rest of them. Did you hear about—which was another unusual event for us—the spraying of trees with Roundup?

Mrs Barkley—No, I did not know anything about that until this inquiry.

CHAIR—Do you know much about spraying mandarins with Roundup? What happens to the tree?

Mrs Barkley—Usually when you spray with Roundup you get a few brown spots on the leaves, if you do not totally kill them.

CHAIR—But would it stop the activity of the plant straightaway? Obviously if you chucked a bit of ester or something in with it the next day the plant would go 'augh'—you would see that it had been sprayed.

Mrs Barkley—It depends on the time of the year and the susceptibility of the tissue.

Senator McEWEN—On page 14 of your submission it indicates that an approach to the Commonwealth to collect a voluntary levy was unsuccessful. What was the nature of the levy—how much and on whom—and what reasons were given for not implementing it?

Mrs Burrows—When the issue came up of possible compensation for the growers we knew that we could only do it through a voluntary levy, not through any sort of compulsory levy, so we approached the government to see whether they would collect it for us.

Senator McEWEN—The state government?

Mrs Burrows—No, the Commonwealth government—the DAFF Levies Revenue Service—and it was indicated to us that no, they would not be able to do that on the basis of a voluntary levy.

Senator McEWEN—And how much were you suggesting?

Mrs Burrows—We had not got around to working that out at that stage. We were just looking around for some ideas of how we might be able to assist with raising some funds to assist the growers in some way, because at that stage we were still proceeding towards signing the cost sharing agreement—not that the cost sharing agreement would have applied to this anyway. We were just using that as a bit of a model.

Senator McEWEN—So they said they could not collect it because it was a voluntary levy and not a compulsory levy. If it had been a compulsory levy, they would have been able to collect it. Is that your understanding?

Mrs Burrows—Yes.

Senator McEWEN—Can you tell us as far as you know what countries refused to take Australia's fruit from that area?

Mrs Burrows—New Zealand certainly refused to take any Australian citrus for a while without treatment. United Arab Emirates refused to take fruit as well. I think they were the two main ones.

Senator McEWEN—Did some other countries put restrictions on as opposed to giving a complete refusal?

Mrs Burrows—Not that I am aware of at this stage.

Senator McEWEN—Has any estimate been made of the cost imposed by the New Zealand phytosanitary requirements?

Mrs Burrows—Not that I am aware of, but it would have been fairly significant because each state had to do their own surveillance before that would be lifted.

Senator McEWEN—But no estimate has been done of the cost?

Mrs Burrows—Not that I am aware of. There may have been.

Senator McEWEN—What about estimates of increased costs that may have been incurred by growers because of the new biosecurity regime that had to be implemented? Have you done any assessments of the likely ongoing costs?

Mrs Burrows—I do not think anything has been done, though most of the growing areas have put in place in some of those measures. I guess in some ways that is a positive that came out of the process more than a negative. Although there was a cost to it, it certainly raised awareness of biosecurity issues and what needs to be done, particularly with pickers moving south on a seasonal basis for the fruit harvest. I know most of the areas now have measures in place.

CHAIR—What are those measures? Do they make them get a new set of overalls?

Mrs Barkley—Yes. Some of the farms supply all equipment to the pickers.

CHAIR—That is a real hazard. I could pick fruit somewhere and then head off 100 miles somewhere else. We discovered that with footrot in sheep. They used to make the shearers wash their boots.

Senator STERLE—That is a bigger worry because there are a lot of transient workers in your industry.

Mrs Burrows—Certainly, yes. They are mainly transitory workers.

Senator STERLE—Mrs Barkley, going back to the canker surviving extremities of temperature, you mentioned bark and leaf. What about the fruit?

Mrs Barkley—Fruit has always been contentious in terms of international trade and it is becoming more so as time goes on—for example, with Argentina trying to get its lemons into California. Most people believe that, with the packing shed procedures of careful examination of fruit with the implementation of either SOPP treatment or bleach, there is probably a minimal risk in movement of fruit. The difference is when we are talking about itinerants who grab some fruit from an orchard which may or may not have symptoms on it as compared to what would occur with fruit coming from a packing shed.

CHAIR—And they then have lunch in the next orchard under the tree.

Senator STERLE—On the fruit, is it out of the realms of possibility that it could be transmitted in a fridge? Would there be a freezer on the farm or at the market, a truck or a refrigerated pan? Could that happen?

Mrs Barkley—Yes. That is why in countries that have canker, for example, when the packing boxes go to the packing shed there is a disinfection of the boxes before they go back out into the farm for the next lot of fruit.

Senator STERLE—If an infected batch of oranges was picked in Emerald and ended up in a market somewhere or sitting in a fridge for a couple of hours waiting to be retransported or redistributed somewhere, should there not be some clean-up of the fridge?

Mrs Barkley—If that fruit had been showing symptoms of canker and was from an infected orchard, theoretically, yes. But you have still got to get from that infected container or whatever it happens to be, back to the live citrus tree for you to be able to complete the cycle. It is a risk analysis of what the connections are.

Senator STERLE—Silly as it may sound, if there was a crate or pallet of oranges that were infected and in that fridge and they went to someone's house or to another area, and if the oranges were discarded near a live tree, it is not impossible that the bug could jump onto the tree and start it again.

Mrs Barkley—It is a possibility.

CHAIR—There is a visual test for canker. Is there a non-visual test?

Mrs Barkley—Yes, and that is what is always used. In fact, wherever you have an exotic disease—

CHAIR—Is the 107 days to detect it visually or non-visually?

Mrs Barkley—Visually. It depends upon the methods that you use as to how long it takes you to be able to confirm that it is citrus canker. There are a number of methods used. You can plate it out and get a bacterial isolate on an agar plate, which takes a few days, and then you can put it through a number of biochemical tests to verify what it is. You can use molecular tests, which will usually give you results by the next day. You can use serological tests, which again will give you results in a couple of days.

You can use another test, which is called a leaf enrichment or pathogenicity test, where you take detached leaves that are at just the right stage, surface-sterilise them and make a few pinpricks in the bottom side. Then you put a drop of the suspect—a macerated lesion of the canker from a leaf, a fruit or whatever—on the wounded area of the leaf under humid conditions. You get symptoms usually about six days later. If you use a range of citrus types, you can get an idea of the pathogenicity of the isolate in the first place and of whether it has a wide host range or a more limited host range.

CHAIR—You were not there when the whistle blew; you were there after the outbreak, weren't you?

Mrs Barkley—Yes.

CHAIR—We interviewed a lady who was given the task of inspecting the orchard in that 18-month inspection period. I think they did it three times, and the last time they did it was three months from the end of that period. She was given a day to drive around with someone else to inspect 20,000 acres, I think she said. I suggested to her that that might be mission impossible. Would you agree with that?

Mrs Barkley—Yes.

CHAIR—Given that this is a plan from a Commonwealth government department, shouldn't the original person who made the decision that one person could drive around 20,000 acres in one day get their head examined?

Mrs Barkley—It does seem an impossible task, but do not forget that, with material that came from China, it is not just citrus canker that is a potential exotic on that material; there are a couple of other quite serious diseases—one probably even more serious that citrus canker, called greening or huanglongbing, which occurs in that area of China. If that were introduced with its vector, it would be even more serious than canker. There are a couple of other diseases—Satsuma dwarf virus, for example—which had to be checked out on that suspect material.

CHAIR—But given all that which builds the case, I do not think—to use very simple language—it was fair dinkum. Whoever made the decision that they were going to supervise the place three times in an 18-month period and so it should be looked at carefully to prevent this catastrophe should not have done it in that way. They would have needed an army of people to do it properly. Has there been some professional criticism of the original decision makers on that?

Mrs Barkley—I am not aware of that.

CHAIR—Then I will do it today. I think it was a bloody disgrace and that person should get the sack.

Mrs Barkley—They were probably misled to a certain extent by the findings on the material that was confiscated. My understanding is that there was not any canker found on the Ponkan mandarins. You have a sampling error in that you are taking a small sample from a larger group of plants.

CHAIR—It is a lottery.

Mrs Barkley—My understanding is that there was no canker found.

CHAIR—Let us say you were given the task and, if I were the department, I had rung up and said, 'I am charging you, Mrs Barkley, with the inspection of this place over an 18-month period to determine whether what we suspect has happened, has happened and you have to tell me the score,' what would you have told me?

Mrs Barkley—That I would need a considerable period to have a look.

CHAIR—Would you have taken samples while you were there and sent them away to be tested?

Mrs Barkley—If there was something suspect there, yes.

CHAIR—I have just been reminded that it was done under the terms that AQIS agreed on with Evergreen at the time. It seems to me that there was something wrong with that agreement. It cannot have been a fair dinkum agreement. We are not experts in this; you are the expert and this is a voyage of discovery. It was a bloody disaster. The people who made that decision and came to that agreement with Evergreen could not have been fair dinkum. There was convenience in the decision to process in that way, otherwise, as you as an expert say, they would have gone to a lot more trouble.

Mrs Barkley—Because canker is often a nursery disease, you would be spending a lot of time in the nursery examining there and then looking at hosts that were either susceptible to or intolerant of the exotic pathogens that you were worried about.

Senator McEWEN—On page 14 of your submission, you ask a series of questions about the alleged illegal introduction to Evergreen. You ask questions like:

Did AQIS Legal and Compliance ascertain that IP 1 legally obtained the variety? Were the trees retested for canker and huanglongbing? When? By whom?

I take it that the reason you have put them in like that is because the industry has not received satisfactory answers to all of those questions. Is that right?

Mrs Burrows—Absolutely.

Senator McEWEN—Are there any other comments you would like to make about AQIS's handling of the allegations about Evergreen Farms, the raid and the follow-up action?

Mrs Barkley—I have some comments on what we were talking about earlier in terms of tracing material that went on to Evergreen. With the alleged material being Ponkan mandarin, the first thing that you would ask is, 'Where would the Ponkan have come from, and with Ponkan being so close to Emperor mandarin, did

Evergreen ever get any Emperor mandarin trees introduced on to their property?' I have not seen any of the tracings of AQIS, but certainly the more recent tracings by QDPI suggest that there was only one tree of Emperor mandarin which went to Evergreen and that was from Golden Grove nursery on 19 December 2002, which is considerably later than what you would expect.

CHAIR—So if you had an inquiring mind—

Mrs Barkley—Yes, I would be asking a few questions in that regard.

CHAIR—Are you surprised they did not?

Mrs Barkley—They may have. I do not know.

Senator McEWEN—So the questions you have posed in your report have not been satisfactorily answered. They have not satisfied the industry. Are there any other comments the industry might like to make about the deed of arrangement with AQIS and the impact it has had on the rest of the industry?

Mrs Burrows—The fact that it was confidential and nobody knew what was in it created a fairly healthy suspicion and a lot of fear on its own, without anything else. That whole agreement—the fact that it was confidential and nobody knew about it—has created ill feeling and an environment of suspicion within the industry. People possibly built more into it than was there.

Senator McEWEN—Has that had a knock-on effect in terms of other federal or state government programs to encourage growers and other people in the industry to report suspicious fruit that is growing?

Mrs Burrows—I do not know if that can be quantified but, in going around and doing consultations with growers on the biosecurity levy, many growers have said to us that, given the experience in Emerald, you would have to have rocks in your head to report that you had something on your property.

Senator McEWEN—Who were those growers blaming?

Mrs Burrows—I think there was probably some suspicion of AQIS.

Senator MILNE—May I go back, Mrs Barkley, and ask you about this trace-back issue? Something that has worried me through this whole inquiry is why there was not a trace-back of the material that they took and then took to the Eastern Creek nursery. Presumably, that material is still there at the nursery. Is it too late to do the trace-back? I presume if they have still got the variety, if they have been able to establish that there is only one other tree that was Emperor, then that increases the probability of the others being the illegal import. Is it too late to do that?

Mrs Barkley—The tracing was done by AQIS and, as I said, I do not know what their tracing showed. But certainly the tracing report that I saw was done by QDPI. It basically goes through all the material that was received by Evergreen. As far as I can see, the only Emperor mandarin that was received by Evergreen was in 2002, which was after the—

Senator MILNE—Sure. That being the case, if you were to do the trace-back and that was demonstrated—that the only Emperor tree came on well after the period we are talking about—what steps would you take once you had identified that? Once you have demonstrated that the Emperor was not there, what would you do next?

Mrs Barkley—You would be asking a lot of questions as to what this variety was that had been identified by CSIRO as being Ponkan or Emperor mandarin and where it actually came from.

Senator MILNE—Is it feasible that you would be able to find out?

Mrs Barkley—I do not know.

Senator MILNE—Is it a regulatory requirement that you ought to be able to find out? If someone had managed their systems properly, under the current regulations, ought you have been able to find out?

Mrs Barkley—Yes. The nurseries have to keep records of material that they have supplied to growers. Likewise, Auscitrus is the supplier of bud wood and has to keep those records, and they have all been supplied to both QDPI and to AQIS. So there seems to be a missing factor. Ponkan mandarin is not commercially available—Emperor mandarin is—although there are sources of it within New South Wales agriculture.

CHAIR—The evidence we were given was that those trees that were of the suspected illegal entry were the ones they got rid of.

Mrs Barkley—Yes, but some went to Eastern Creek.

Senator MILNE—Yes. That is the point. Given that it is not too late, and given that some trace-back was attempted, it would not be beyond this committee to be able to require the trace-back to be put into effect.

CHAIR—I think we will be having AQIS back for another hearing. Following the undetermined conclusion on Eastern Creek, are those trees still there?

Mrs Barkley—I do not know. They were there a couple of years ago—

CHAIR—If they are still there, and as they get older and more mature, might you be able to get a better idea of what they are?

Mrs Barkley—If people who are familiar with citrus varieties—and there are a number of us throughout Australia—look at the fruit, taste the fruit and go through all of the leaf and fruit characteristics, they would be fairly certain. That is backed up by CSIRO's isozyme analysis on the material as well.

CHAIR—Do you think this committee should recommend that they go back and have another go at that, if they are still there?

Mrs Barkley—It is probably a good idea that people who are knowledgeable in citrus varieties actually look at the fruit. It is probably getting a bit late now—

CHAIR—I still have some mandarins on the trees.

Mrs Barkley—There may still be some old fruits present.

Senator MILNE—What does that CSIRO process that you just mentioned do? If it is too late for the fruit, would that process identify the variety?

Mrs Barkley—They do that on leaf material usually. It is a chemical testing.

Senator MILNE—What does it show?

Mrs Barkley—I am not an expert in this area, but you have standards, which would be in this case Imperial mandarin, the suspect; Ponkan mandarin, which they have from seed sources; and Emperor mandarin. You would run gels and look at the profiles down those gels and whether they compare.

Senator MILNE—So even in the absence of fruit, if you ran that CSIRO test—I am trying to establish whether it was too late for fruit—

Mrs Barkley—No, they have done that. If you contact Steve Sykes from CSIRO, he could fill you in on what his results were.

Senator MILNE—So they have already done that?

Mrs Barkley—Yes.

Senator MILNE—Who did they do that for?

Mrs Barkley—For AQIS, I believe.

CHAIR—As I understand it, we have the paper.

Senator MILNE—Okay.

Senator McEWEN—There is a comment in your submission about the review of the legislative powers of each of the states and their effectiveness in the future to prevent any similar sorts of incursions. Can you elaborate on that? Are the powers adequate and, if not, what should be done?

Mrs Burrows—There are issues with the legislation, as I understand it, in Queensland, where there were legislative issues in removing trees that were not infected. That was obviously a hold-up to a total eradication program. I understand that there are all sorts of varieties of legislation in each state similar to that. If we are going to have a total program to look at plant health and eradication of things, we need to get all those acts lined up so that there are opportunities to go for total eradication, even if it means the removal of non-infected trees.

Senator McEWEN—Are the powers inadequate at the moment to prevent—

Mrs Burrows—They are probably inadequate. I am not an expert on the various state laws, but I think they all need to get lined up. That may well happen under the new Emergency Plant Pest Response Deed.

Senator McEWEN—Do you have any comments about that, Ms Barkley?

Mrs Barkley—When it was considered by the scientific advisory panel, the question was asked whether it is possible that all the citrus throughout Emerald could become infected. It stood to reason that, given it had

gone seven-odd kilometres from Evergreen to IP2—assuming that that is what happened—and there were other farms within similar distances, there was the possibility that it could have gone to other farms. That then translated into 'deemed to be infected', so terminology can become quite important in legislation.

CHAIR—There would be a fair chance that the infection may have been just carried by pickers, wouldn't there?

Mrs Barkley—There was not any movement between Evergreen and 2PH in terms of pickers.

CHAIR—As an expert—don't frown!—are you able to give us a snapshot? If I take a cutting and want to take it from here to Bullamakanka, how long will it live for, in what conditions, such that it is able to bud?

Mrs Barkley—I have personal experience of it being a year, but that was a cutting kept in one of those vegetable type bags and within a refrigerator at about two to four degrees centigrade. It depends upon the variety, but the bud wood can still be quite viable after a year. So it depends upon whether it has been allowed to dry out or—

CHAIR—So it would certainly be an easy task for a week, in the right conditions?

Mrs Barkley—Yes, as long as you did not let it sit in the back of your car, in the window, or dry out in any way.

CHAIR—So if it were in a tea chest with tea or something in it, it would be good?

Mrs Barkley—And within a plastic bag or even sometimes moist newspaper, although that is often not a good idea.

Senator MILNE—Mrs Barkley, I would like to ask you about this CTV that was identified, particularly in relation to knowing where it came from and whether you can identify it as a strain that had previously not existed in Australia. Do you have any comment to make about that?

Mrs Barkley—Yes. Citrus tristeza virus has been in Australia probably since about 1860, and it is spread by the brown citrus aphid, which as you are probably aware is in most places. Citrus tristeza occurs in nearly every citrus tree in Australia. It is a very long, flexuous virus, and it has a very variable genome. You get a lot of mutation and recombination occurring, so you get all these strains. Within a citrus tree in Australia, if you tried to visualise the tristeza present in the phloem cells, it is probably like a plate of spaghetti, and a lot of those strands are different strains of the virus.

One of the difficulties in the work that was done—and that work again was done by Deborah Hailstones at EMAI and by Mark Hilf from the USDA in Florida. Certainly they showed that it was different to anything they had seen before. But that does not mean that it is necessarily exotic to Australia, because you have so much strain variability. I made a collection of CTV strains when I was working for New South Wales Agriculture, and these were some that Deborah compared against, but they were collected not to look at the diversity of strains but really to look for cross-protective isolates or for orange stem pitting isolates that occurred in Queensland. In the report Mark Hilf gave, for example, he says it is a different strain to what has been seen before. But that does not mean it is necessarily exotic. There again, with the tracing, if you looked at what was present in the Ponkan look-alike, which might have been local, compared to the alleged illegal importation, you might have got a bit more information.

But remember that Evergreen had a huge number of varieties on the property. All of those would have had a different assemblage of tristeza strains present in them. It is like looking for a needle in a haystack to determine whether that particular strain existed in those other varieties because, when you change from one variety to another, the assemblage of the strains changes too. So lemons might replicate certain lots of strains, whereas oranges will replicate a different lot of strains. Unless your molecular techniques are very good, you are not going to be able to pick up the particular virus strain if it is present at a very low level.

Senator MILNE—Except that you could narrow it down. If you had already made the judgment that in the absence of Emperor variety on the property then there was a much higher probability that you had an exotic strain, an exotic plant that had not been—

Mrs Barkley—Not without knowing what strains were present in all the other citrus varieties and types that were present on the property. It might have existed in a Nova tangelo or something like that. Because of the time it had been there, and because of how good the brown citrus aphid is at transmitting the strain from one tree to another, there is a possibility that it came from some other variety. It might have been an endemic variety and the strain had gone across into that material. So, to get anything meaningful would have been a major research project.

If it was coupled with some other observations, for example if there were stem pitting in mandarins and it was associated with that strain—and we do not have stem pitting in mandarins in Australia caused by tristeza virus, although they do in a couple of places in Asia—then you would have said, 'I think we have got an exotic strain here,' because of what that symptomatology was. I do not know any of the results, but my understanding was that some of the biological indexing on the different hosts was done at the plant quarantine station at Eastern Creek. But I do not know whether anything unusual occurred in that biological indexing that might have added weight to the molecular testing that was done.

Senator MILNE—So at Eastern Creek they did the biological indexing plus the other study of the leaf matter that you mentioned a minute ago?

Mrs Barkley—No, the isozyme stuff was done at CSIRO.

Senator MILNE—Okay, so we have got the CSIRO stuff and we have got the biological indexing from Eastern Creek. Have they been brought together anywhere, for anyone to see if they assist us in this?

Mrs Barkley—I do not know.

Senator MILNE—Would CSIRO have done it for AQIS?

Mrs Barkley—CSIRO did the isozyme analysis for AQIS—

Senator MILNE—And the biological indexing?

Mrs Barkley—That was done by AQIS at Eastern Creek, as I understand it.

Senator MILNE—So in theory AQIS should be able to bring both sets of information together to see—

Mrs Barkley—Along with the molecular testing that was done for the CTV. It was done by New South Wales Agriculture and also by the USDA in Florida.

Senator MILNE—If you brought those three lots of data together, what might they tell you? What might it narrow down for AQIS, if they brought those three things together?

Mrs Barkley—I am not sure that you could bring the three things together. There is the identification of the variety, the identification of the tristeza strains and the possibility of whether they are exotic. You need to bring the biological indexing together with the molecular testing.

Senator MILNE—And that would narrow it down for you?

Mrs Barkley—It would if the biological indexing showed anything unusual, such as stem pitting symptoms in mandarins.

Senator MILNE—Okay. So we need to pursue with AQIS what those things showed together, if anything. Thank you.

CHAIR—I still want to go back to this. Something does not seem to be right. The whistleblower blew the whistle. We were given evidence that, despite the determination of the people who were to raid the place, they seemed to have notice that they were coming—I guess that is the bush telegraph at work—they went into quarantine and Evergreen contested the quarantine in court and lost. Then, for whatever reason, AQIS decided they would go into this deed of confidential arrangement. That may well be because they did not want to be sued by Evergreen for the loss of income from their grapes.

It seemed to me that AQIS were holding all the cards, but for some reason they went into this deed of arrangement which included what I would call this 'non fair dinkum' inspection regime. To the best of our knowledge, they had three inspections over a 15-month period and the last inspection was three months from the end of the inspection period. When the citrus canker outbreak occurred, there was evidence that it was probably there during the inspection period.

Mrs Barkley, from what you have said today, if you were given the task of inspecting the farm in a day with an offsider to open the gates for you, it would have been just ridiculous. It seems to me that this committee needs to ask why such a ridiculous proposition was put in place. Do you think that would be a reasonable question for us to ask of the people who made that decision?

Mrs Barkley—Yes, I think it probably would be. I am not aware as to whether there are standard operating plans for inspections such as this or for raids that are carried out, but it seems as though it is one area for the future that there should be—just as we have a contingency plan which has stood us partly, but not totally, in good stead for tackling the canker. They need to be clearly defined by AQIS. They may already exist; I do not know. But it would seem that plans need to be put in place for these situations.

CHAIR—Do you have some plans or suggestions for the industry, AQIS and the department to assist them in this future plan? Have you been asked to contribute to what might be a better plan?

Mrs Barkley—Are you talking about the contingency plan?

CHAIR—Yes.

Mrs Barkley—I was involved with the development of the canker contingency plan and the biosecurity plan for citrus. But it was mostly done by Biosecurity Australia. I think it has fallen down in a few places but there is a lot of good information in that contingency plan and it now needs to be upgraded in the light of all the experience that we now have. It certainly was a starting point for dealing with the outbreak.

CHAIR—Between what I would have thought was a dodgy confidential agreement—dodgy because it seemed to me that it would have very much favoured the person not holding the cards—and the submission that was handed up by the compliance people to the DPP, which failed to even interview the manager of the farm at the time, it seems to me that something was not right. Do you think it would be unfair of me to have a suspicion that someone was not being fair dinkum? I just cannot believe that a professional group of compliance people, in this event, could possibly not interview the manager of a farm if they were trying to find out what happened. It is just a bloody disgrace.

Mrs Barkley—There is also a possibility that there are people with other—

CHAIR—I am sure there are other explanations and we would love to hear them so that I do not have it in my mind that it is a disgrace. Perhaps there is an explanation, but I think it was Inspector West at his worst. Are there any further questions?

Senator MILNE—Throughout this inquiry one of the problems that AQIS identified was that they could not put the farm into quarantine over the CTV virus because it was not one of the listed viruses on the schedule to the act. It seems to me that that is a major shortcoming of the legislation—unless every single disease you can think of is listed in the schedule, you can get something exotic coming in. You can have a high suspicion and a probability that something is exotic and yet, unless it appears on the list, you cannot quarantine the property, take action and so on. Would the industry be supportive of a change to the legislation? Would it be helpful to the industry if a rider were put on top of the list which said 'or any other exotic strains unknown in Australia' or something like that so that it would not just cover the specific ones on the list but any others that we may not have identified at any one time but were known to be exotic?

Mrs Barkley—If you are importing material of citrus legally through quarantine, that material is tested for anything and everything. If there is a detection of tristeza virus, for example, that material has to be cleaned up before it is released to the importer, regardless of what the strain is. So that exists already for citrus. In terms of exotic strains of tristeza virus, in terms of the biosecurity plan and eradication et cetera, if I remember correctly, mandarin stem pitting strains of tristeza virus are actually present on that list which was developed by Biosecurity and forms part of the citrus biosecurity plan.

Senator MILNE—When they identified a tristeza virus which they had a reasonable expectation may have been exotic, although they could not prove it, given that on the list already there was the prohibited import or alert to particular varieties that caused that pitting, could they not have quarantined the farm on the basis that there was a probability that one of these viruses that were listed could have been the exotic virus that they identified?

Mrs Barkley—I think it comes down to probabilities as to whether there really was the potential for it to be exotic or whether it was endemic, and there was not enough information to be able to say that it was exotic. It was different, it was something that had not been seen before, but, as I said earlier, it would have required quite a research project and a huge amount of testing of trees on Evergreen—and possibly elsewhere within the district to determine whether it was present elsewhere—and we would not have known where it might have come from in the first place.

Senator MILNE—So, even though that disease was listed on the schedule and there was a probability that what was in that plant material was exotic, you do not think that was enough for AQIS to quarantine the farm in the absence of the testing.

Mrs Barkley—I personally do not, but I am tackling it from a scientific point of view. I would have wanted additional confirmatory tests such as what we were talking about with the biological indexing to show that there was something that was different.

Senator MILNE—How long would that have taken? You said it would have required extensive research. The problem I have is that, if you wait for scientific proof, your disease can get away because you have not quarantined the property. If you take pre-emptive action, you can be sued for quarantining a property because you could not prove it at the time. In what time frame would you be able to establish sufficient scientific indicators, if not certainty, that you were dealing with something on the quarantinable list?

Mrs Barkley—If it showed symptoms on mandarins, for example, those symptoms may have taken anything up to a year to develop. That is, as you were indicating, one of the problems in getting confirmatory information that a strain is exotic. The research that would then be required in terms of molecular testing would take a considerable period of time too.

Senator MILNE—The problem for us is that the onus of proof is currently adverse to the public interest. That is my concern. So we should reverse the onus of proof. The issue for the growers—I would like Leonie's comment on this—is that if we were to reverse the onus of proof, AQIS could quarantine properties without the scientific certainty but with scientific indicators. That would mean that some people's properties may be quarantined and, ultimately, shown not to have whatever it was that you suspected they had, in which case the grower would incur some losses in that period of quarantine. If we were to reverse the onus of proof, then there is an obligation to set up some compensatory mechanisms to protect the growers. Has your organisation discussed which way you would prefer it to go, given what has happened at Emerald? Do you understand what I am asking?

Mrs Burrows—Yes, I understand. No, we have not discussed that. Most of our discussions have been about the reimbursement provisions within the Emergency Plant Pest Response Deed. We have not discussed the issue of reversing the onus of proof.

Senator MILNE—It is perhaps an issue that the organisation should look at. If you were to go with reversing the onus of proof then, in this case, Evergreen would have been quarantined and the rest of the district may well have been saved. The other way has occurred where, in the absence of scientific proof, the quarantine did not occur and now the bill is 10 times greater than it otherwise would have been. I am just putting it to you as something we need to consider as to how we respond.

Mrs Burrows—If that were to happen you would have to have some pretty good mechanisms in place to get going with doing the testing quite quickly—not drag it on and not have results. There would need to be some sort of faith that you would get cracking and get a result one way or the other.

CHAIR—The great difficulty with that would be if you had a personality clash of some kind and you decided you were going to do your neighbour in. You could do it in a way that could result in AQIS turning up and saying to them, 'Prove to us you haven't got something on your farm.'

Senator MILNE—That is right.

CHAIR—That could become an evil enterprise.

Senator MILNE—That is why I am saying there are advantages and disadvantages of reversing the onus of proof.

CHAIR—We were given some pretty splendid evidence about the woman who was on mission impossible and went around the 20,000 acres in that 18-month period. The evidence was that she took the citrus manager with her. I do not think she was allowed to just go willy-nilly; it was suggested where she might go. From the evidence we were given, she did not take any samples to be tested by the non-visual method. Shouldn't she have?

Mrs Barkley—In the absence of any symptoms it would have been like looking for a needle in a haystack. With that huge number of trees, which one would you take?

CHAIR—At least you would take a ticket in the lottery, wouldn't you? I would have.

Mrs Barkley—I think a ticket in the lottery would have been a lot more productive.

CHAIR—It would have been a needle in the haystack, but so were the 20,000 acres in a day and saying, 'You can go here but not over there'. If I lobbed on a place in that 18-month period and there were row after row sprayed with Roundup, I would have been curious as to whether it was killing the trees. But that does not seem to have been raised as an issue during the infection period. It seems to me that something is not right.

Mrs Barkley—She had already taken the samples in the raid and they were being worked on. So she had samples that were being tested for huanglongbing, canker and—

CHAIR—I am not blaming the lady that did the job; I am blaming the people that gave her the impossible task. To the best of her ability she did it but, as you say, she probably needed several other people, if not an army of people, to do it in a day. Is there anything else you would like to tell us? Have you a chronology of events or anything that you would like to give us?

Mrs Barkley—Not really.

CHAIR—You have nothing you would like to table? Have we missed things that you would like to tell us?

Mrs Barkley—In some ways, in terms of the tracing, having people who are knowledgeable about citrus and who can ask the right questions is one of the things that is essential for getting the right answers.

CHAIR—How many of those people are there in Australia?

Mrs Barkley—In most of the state departments there are several people who work on citrus and have a knowledge of the citrus industry. In the next step out, you have pest scouts or industry development officers who are very familiar with citrus and with how citrus works—with the citrus organisations and the movement of citrus within the industry. As well as that, turning to citrus canker, for example, there is a guy at AQIS who probably knows as much about citrus canker as anybody else in Australia through working with NAQS. I think that some of the expertise that is out there, whether it be in surveillance or diagnostics or whatever, has not been captured for this outbreak.

CHAIR—Would you—and you do not have to—hazard a guess as to why the decision makers would have put in place the process they did in 2001, with that 18-month inspection period?

Mrs Barkley—I do not know.

CHAIR—Does it seem a bit whacko to you?

Mrs Barkley—Unless they suspected that 18 months was a logical period for the development of symptoms for canker.

CHAIR—Which would be reasonable?

Mrs Barkley—Which would be a reasonable assumption.

CHAIR—You would have thought, though, that if that is what was in their minds—that they were going to have a watching brief on this place—then during that period, besides the samples they took at the beginning, they would have taken some progressive samples, especially given the evidence that this bloke sprayed all these trees. Say you spray a tree with Roundup and it begins a slow death. If you were to take a sample after it was sprayed, would citrus canker turn up if the plant had it?

Mrs Barkley—I think it would be much more difficult to isolate or detect the canker if it was present, unless there were some symptoms that were actually showing. If you have senescing tissue, you have all sorts of other organisms that are present that make it that much more difficult to pick up the pathogen.

CHAIR—So, using a bit of bush cunning, if you had imported some cuttings illegally and you did not want to be caught, then it would be a good idea to spray them to get rid of the ability to test them.

Mrs Barkley—Get rid of them one way or another—whether you put them on a fire, spray them with Roundup or whatever.

CHAIR—They tell me they ended up at the tip. There is nothing else you would like to add?

Mrs Barkley—No, thank you.

CHAIR—We are very grateful for your help, and we are very disappointed that the people of Emerald have had to endure what they have had to endure. I hope this is a lesson for all Australians for the future.

Committee adjourned at 5.38 pm