

**WORLD TRADE ORGANIZATION**

*Panel established pursuant to Article 6 of the  
Understanding on Rules and Procedures Governing the Settlement of Disputes*

**AUSTRALIA – MEASURES AFFECTING THE  
IMPORTATION OF APPLES FROM NEW ZEALAND  
(DS367)**

**Australia's comments on New Zealand's comments on the  
experts' replies to questions**

Geneva, 9 April 2009

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## I. INTRODUCTION AND GENERAL COMMENTS

1. Australia welcomes this opportunity to comment on New Zealand's comments on the experts' replies to the Panel's questions. As many of the specific issues raised by New Zealand have already been adequately dealt with in Australia's comments on the experts' replies, Australia will not rehearse those points again. Nonetheless, Australia considers that there are some aspects of New Zealand's comments which warrant attention. These are dealt with below. Australia reserves the right to return to New Zealand's comments in its subsequent submissions.

2. New Zealand appears to accept that the Panel's role in this dispute should be to determine whether the Final IRA Report is a valid risk assessment within the meaning of the *SPS Agreement*.<sup>1</sup> In Australia's view, this represents acknowledgment from New Zealand that its approach – in which it presented an alternative view of the scientific evidence and sought the Panel to determine the “correct” level of risk<sup>2</sup> – did not reflect the appropriate relationship between Articles 5.1 and 2.2, and the implications of the Panel's standard of review.

3. In relation to the role of the experts, New Zealand emphasised that:

The role of the experts in this case is to assist the Panel on scientific and technical issues that fall within the experts' respective areas of expertise.<sup>3</sup>

Australia agrees with New Zealand's statement. However, Australia considers that New Zealand's statement is hard to reconcile with the approach then taken by New Zealand in its comments on the experts' replies. On many occasions, New Zealand highlights statements from particular experts who were not appointed in the field of expertise to which those statements relate.<sup>4</sup> Australia agrees with New Zealand that such statements “should be treated with care”.<sup>5</sup>

4. More generally, Australia considers that New Zealand continues to fail to appreciate the distinction between the roles of the Panel and the experts. New Zealand repeatedly asserts that

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<sup>1</sup> See, for example: New Zealand's comments on the experts' replies, paras. 1, 3, 5, 10, 23, 58, 64, 68, 69, 110, 126, 139, 142, 146, 161, 187 and 189.

<sup>2</sup> For example, in its first written submission, New Zealand submitted that: “The likelihood of the coincidence of circumstances that would be required to establish such a pathway for transmission of the disease via mature, symptomless fruit is negligible.” (New Zealand's first written submission, para. 4.8.)

<sup>3</sup> New Zealand's comments on the experts' replies, para. 3.

<sup>4</sup> See, for example: New Zealand's comments on the experts' replies, paras. 26, 27, 37, 42, 48, 55, 61, 67, 89, 93, 97, 108, 124, 154, 183 and 184.

<sup>5</sup> New Zealand's comments on the experts' replies, para. 4.

“the experts [state/confirm] that the IRA’s conclusions do not find sufficient support in the scientific evidence”.<sup>6</sup> In Australia’s view, whether particular scientific evidence is “sufficient” or not, within the meaning of Articles 2.2 and 5.1 of the *SPS Agreement*, requires a *legal determination* which only the Panel can make. By contrast, the experts’ role is limited to *assisting* the Panel by providing an opinion on the degree to which particular conclusions of a risk assessment are *supported* by scientific evidence within the *available* body of scientific evidence.

5. New Zealand has been selective in drawing on the experts’ replies. Notably, New Zealand has only identified statements which appear to support its case, while not engaging on key issues raised by the experts which do not accord with its position. For example, in relation to fire blight, New Zealand is silent on the fact that the experts do not consider that “mature, symptomless apples” will achieve Australia’s ALOP, and that they support Australia’s principal risk reduction measures.<sup>7</sup> In doing so, New Zealand seeks to portray a single “correct” view of the science in this dispute, an approach which New Zealand itself has accepted as invalid.<sup>8</sup>

6. Further, in ignoring important context provided by the experts’ replies, Australia is concerned that New Zealand misrepresents some of the experts’ views. For example, New Zealand draws selectively on the comments of the experts directed at the probability ranges assigned by the IRA Team for various elements of the risk assessments for the pests at issue. Australia is concerned that, in doing so, New Zealand ignores many other aspects of the experts’ replies, and accordingly neglects the IRA Team’s detailed reasoning which underpins the risk assessment.

7. In many cases, New Zealand has relied on the experts’ responses to advance new arguments that it has not made before. This is incompatible with the principle that New Zealand, as the complainant, bears the burden of proof. Australia submits that the Panel may not draw on New Zealand’s comments, or the relevant experts’ replies, to make New Zealand’s case.

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<sup>6</sup> See, for example: New Zealand’s comments on the experts’ replies, paras. 23, 26, 36, 46, 52, 62, 64, 71, 86, 91, 95, 99, 103, 106, 110, 126, 139 and 146.

<sup>7</sup> See: Australia’s comments on the experts’ replies, paras. 36-41.

<sup>8</sup> New Zealand’s responses to the Panel’s questions after the first meeting, para. 272.

Examples of where New Zealand has taken this approach are identified in Australia’s specific comments below.

8. In considering New Zealand’s comments in relation to scientific analysis, Australia wishes to emphasise to the Panel that scarce scientific evidence should not be equated with an absence of scientific credibility, as New Zealand appears to suggest.<sup>9</sup> Australia recalls that the “sufficiency” of scientific evidence under Article 2.2 (and accordingly Article 5.1) is a “relational concept”<sup>10</sup> and, therefore, is a legal standard which ought to be applied on a case-by-case basis.<sup>11</sup> In Australia’s view, where the scientific evidence is uncertain – whether for lack of data, poor data or some other reason – then the Panel ought to bear this in mind when deciding whether there is “sufficient” scientific evidence to support a particular step in the pathway. Further, Australia recalls the point made in its comments on the experts’ replies that data available in the context of pest risk assessments will not often be comprehensive.<sup>12</sup> As such, assessments have to be undertaken on the basis of available, albeit often incomplete, data.<sup>13</sup> Although stated in general terms, these comments apply equally to individual steps in the pathway of pest establishment.

## II. SPECIFIC COMMENTS

### A. QUESTIONS SPECIFIC TO RISK ANALYSIS

9. New Zealand provides a very limited selection of quotations from the experts’ replies in claiming that the experts’ comments support its arguments that there are fundamental flaws in the semi-quantitative methodology used in the Final IRA Report.<sup>14</sup> Although New Zealand refers generally to the experts’ replies in making this claim, Australia notes that New Zealand

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<sup>9</sup> See, for example: New Zealand’s comments on the experts’ replies, paras. 36, 57.

<sup>10</sup> Appellate Body Report, *Japan – Agricultural Products II*, para. 73.

<sup>11</sup> Appellate Body Report, *Japan – Agricultural Products II*, para. 73 and 84.

<sup>12</sup> Australia’s comments on the experts’ replies, para. 21.

<sup>13</sup> Australia’s comments on the experts’ replies, para. 22.

<sup>14</sup> New Zealand’s comments on the experts’ replies, para. 7.

fails to mention any comments made by Dr Schrader. In contrast, New Zealand seeks support from the comments of Prof Latorre, who was not appointed as an expert in risk assessment.<sup>15</sup>

10. New Zealand begins by citing Dr Sgrillo's statement that no explanation is given for the use of the semi-quantitative methodology,<sup>16</sup> but fails to provide the full quotation in which Dr Sgrillo went on to state that:

Australia has noted, however, that [the] SPS Agreement does not prescribe a particular risk assessment methodology.<sup>17</sup>

11. New Zealand claims that the experts' replies support its criticism of the choice of  $10^{-6}$  as the maximum value of the probability interval between 0 and  $10^{-6}$ , and refers to Dr Sgrillo's comments on this issue.<sup>18</sup> Dr Sgrillo observed that different maximum values could have been used "without violating any scientific principle".<sup>19</sup> In this regard, Australia recalls its own comments on this observation that if different maximum values could have been used for the interval without "violating any scientific principle", then the choice of  $10^{-6}$  would not do so either.<sup>20</sup> Further, New Zealand continues to demonstrate its misunderstanding as to the use of the intervals and their descriptors, a misunderstanding that Australia has previously addressed.<sup>21</sup>

12. In claiming support from the experts for its criticism of the use of uniform distributions in the Final IRA Report, New Zealand fails to refer to Dr Schrader's comment that a uniform distribution:

...is useful in situations, where a minimum and maximum value are available, but no sufficient information to determine the most likely value.<sup>22</sup>

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<sup>15</sup> New Zealand's comments on the experts' replies, paras 15 and 22.

<sup>16</sup> New Zealand's comments on the experts' replies, para. 8.

<sup>17</sup> Reply of Dr Sgrillo, q. 128.

<sup>18</sup> New Zealand's comments on the experts' replies, para. 13, taken from reply of Dr Sgrillo, q. 134.

<sup>19</sup> Reply of Dr Sgrillo, q. 134.

<sup>20</sup> Australia's comments on the experts' replies, para. 27.

<sup>21</sup> Australia's first written submission, paras. 295-297; Australia's responses to the Panel's questions after the first meeting, q. 97; Australia's comments on the experts' replies, paras. 24-25.

<sup>22</sup> Reply of Dr Schrader, q. 135.

**B. QUESTIONS SPECIFIC TO FIRE BLIGHT****(a) Probability of entry****i. Importation step 3**

13. New Zealand claims expert support for the view that “the IRA’s conclusion in relation to this step is not sufficiently supported by scientific evidence”.<sup>23</sup> However, Australia considers that the statements selectively chosen by New Zealand<sup>24</sup> exaggerate the level of expert support for New Zealand’s claims. A closer examination of Dr Deckers’ and Dr Paulin’s replies below shows that they support the IRA Team’s reasoning.

14. Australia recalls that the IRA Team’s analysis of Importation step 3 takes into account well-documented evidence that rain can vector *E. amylovora* and therefore facilitate contamination.<sup>25</sup> Contamination arising from trash such as leaves and twigs was taken into account,<sup>26</sup> as was the fact that surface contamination could also cause infection if fruit were damaged at the time of picking and transport, for example, during a hailstorm.<sup>27</sup> Australia explained the IRA Team’s analysis of Importation step 3 in its first written submission.<sup>28</sup>

15. Dr Deckers supports this analysis noting that “the likelihood of contamination by EA during picking and transportation is possible when the harvest takes place in a heav[il]y infected orchard[s] during rainy circumstances.”<sup>29</sup> Dr Paulin similarly notes that “it is possible also that wind-driven rain carries bacteria from the surface of symptoms to fruits, or that rain washes exudate from symptoms situated in the upper part of the tree down onto the fruits.”<sup>30</sup>

16. Both experts agree that hailstorms can increase the availability of infected fruit in orchards which in turn could cause contamination during harvest.<sup>31</sup> Importantly, Dr Paulin considers that “[d]ecaying fruit and trashes would represent a higher risk”.<sup>32</sup>

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<sup>23</sup> New Zealand’s comments on the experts’ replies, para. 36.

<sup>24</sup> New Zealand’s comments on the experts’ replies, paras. 37-39.

<sup>25</sup> Final IRA Report, Part B, p. 70.

<sup>26</sup> Final IRA Report, Part B, p. 71.

<sup>27</sup> Final IRA Report, Part B, p. 70.

<sup>28</sup> Australia’s first written submission, paras. 412-418.

<sup>29</sup> Reply of Dr Deckers, q. 27.

<sup>30</sup> Reply of Dr Paulin, q. 6.

<sup>31</sup> Reply of Dr Deckers, q. 6; Reply of Dr Paulin, q. 6.

ii. Importation step 4

17. The relevance of New Zealand's comments in relation to Importation step 4 is unclear as New Zealand does not explain how the experts' replies relate to issues in dispute.

18. The experts have only discussed cold storage and the efficacy of disinfection in their replies to questions on Importation step 4. New Zealand has not challenged Importation step 4 on the basis of disinfection – it has advanced arguments only in relation to cold storage.<sup>33</sup> Accordingly, New Zealand may not now rely on the experts' responses on Importation step 4 to introduce an argument that it failed to make previously.

19. In relation to cold storage, it is unclear to Australia in what way the experts have “expressed doubts”<sup>34</sup> about the IRA Team's conclusion on Importation step 4. Both Dr Deckers and Dr Paulin state that *E. amylovora* will survive cold storage which represents unequivocal support for Australia's position.<sup>35</sup>

20. In any event, Australia notes that New Zealand primarily relies on Dr Sgrillo's response to Question 28 in support of its views. In this regard, Australia recalls that the Panel should only rely on Dr Sgrillo's advice to the extent that it falls within his appointed area of expertise.<sup>36</sup> As New Zealand itself notes, statements outside the areas for which experts were appointed “should be treated with care”.<sup>37</sup>

iii. Importation step 5

21. The relevance of New Zealand's comments in relation to Importation step 5 is unclear as New Zealand does not explain how the experts' replies relate to issues in dispute.

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<sup>32</sup> Reply of Dr Paulin, q. 26.

<sup>33</sup> New Zealand's first written submission, para. 4.226. See also: New Zealand's first written submission, para. 4.18. Australia notes in this regard that Dr Deckers and Dr Paulin both express considerable doubts about the efficacy of cold storage as a risk reduction measure (see: Reply of Dr Deckers, qs.14 and 29; reply of Dr Paulin, qs.14 and 29). Indeed, Dr Paulin explicitly states that “it is not possible to rely on cold storage condition[s] to ascertain that not a single bacterial cell will remain alive...Among the options evaluated by Australia...cold storage is probably the less effective.” (Reply of Dr Paulin, q. 14). Dr Deckers also notes that “EA bacteria can easily survive a cold storage period”. (Reply of Dr Deckers, q. 29)

<sup>34</sup> New Zealand's comments on the experts' replies, para. 41.

<sup>35</sup> Reply of Dr Deckers, qs. 29 and 31; Reply of Dr Paulin, qs. 28, 29 and 31.

<sup>36</sup> Australia's comments on the experts' replies, para. 79. See also: New Zealand's comments on the experts' replies, para. 4.

<sup>37</sup> New Zealand's comments on the experts' replies, para. 3.



22. The experts have only discussed the efficacy of disinfection in addressing potential contamination in the dump tank in their replies to Question 30. New Zealand has not challenged Importation step 5 on the basis that dump tank water is not a source of contamination.<sup>38</sup> Accordingly, New Zealand may not now rely on the experts' responses on Importation step 5 to introduce an argument that it failed to make previously.

23. In any event, New Zealand primarily relies on Dr Sgrillo's response to Question 30<sup>39</sup> in support of its views. Dr Sgrillo's response appears to be partially based on his opinion about the biology of *E. amylovora*. As Dr Sgrillo was appointed to assist the Panel's understanding of risk assessment methodology, and not fire blight, the Panel should rely on Dr Sgrillo's advice only to the extent that it remains within his appointed field of expertise.<sup>40</sup>

iv. Importation step 6

24. New Zealand implicitly continues its defence of Roberts and Sawyer (2008) by claiming support from Dr Paulin's reply to Question 42. However, Australia considers this claim to lack credibility in light of Dr Paulin's and Dr Deckers' responses to Question 41, where they both state that Roberts and Sawyer (2008) is irrelevant and inappropriate to this dispute.<sup>41</sup>

v. Importation step 7

25. New Zealand has not advanced substantive argument in relation to bacterial ooze production in mature apples under Importation step 7.<sup>42</sup> Accordingly, although New Zealand now references the experts' replies to Question 32 on this issue as purported support for its arguments against the IRA Team's analysis of Importation step 7, it may not rely on those replies to introduce an argument that it failed to make previously.

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<sup>38</sup> New Zealand's first written submission, para. 4.228.

<sup>39</sup> Question 30 invites comment on Importation step 5 (the probability that apples are contaminated during processing in the pack house).

<sup>40</sup> Australia's comments on the experts' replies, para. 79. See also: New Zealand's comments on the experts' replies, para. 3.

<sup>41</sup> Reply of Dr Paulin, q. 41; Reply of Dr Deckers, q. 41.

<sup>42</sup> New Zealand's first written submission, para 4.232.

vi. Overall probability of importation of *E. amylovora*

26. New Zealand claims expert support for the view that the Final IRA Report's conclusion on the probability of importation is not "sufficiently supported by scientific evidence".<sup>43</sup> However, New Zealand's comments fail to account for the full range of expert opinion. Australia notes that while the experts express some doubts about the overall probability of importation,<sup>44</sup> this conclusion should be weighed against the specific support which Australia has identified at particular Importation steps. In Australia's view, there is sufficient support from the experts for the detail of the IRA Team's reasoning to suggest that any purported exaggeration of the probability range is not a serious flaw.

27. Australia recalls that both Dr Deckers and Dr Paulin express support for the application of risk management measures for fire blight – in particular, that apples be sourced from orchards free of fire blight symptoms<sup>45</sup> and fruit disinfection be used.<sup>46</sup> These are Australia's principal risk reduction measures for fire blight. This support is fundamentally incompatible with New Zealand's assertion that mature apples do not provide a pathway for fire blight.<sup>47</sup>

28. Dr Deckers' and Dr Paulin's support strongly suggests that the overall estimate of risk in the fire blight risk assessment, and the consequent conclusion that Australia's measures are warranted, is not seriously flawed.

**(b) Exposure**

29. Australia notes that, in its submissions, New Zealand has not challenged the IRA Team's exposure analysis on the basis that mechanical transfer does not occur – it has focussed only on insect-vectored transmission.<sup>48</sup> Accordingly, although New Zealand now references the experts' responses on mechanical transmission as purported support for its arguments against the IRA Team's exposure analysis, New Zealand may not rely on these responses to introduce an argument that it failed to make previously.

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<sup>43</sup> New Zealand's comments on the experts' replies, para. 57.

<sup>44</sup> Reply of Dr Deckers, q. 34; Reply of Dr Paulin, q. 34; Reply of Dr Sgrillo, q. 34.

<sup>45</sup> Reply of Dr Deckers, q. 8; Reply of Dr Paulin, q. 6(d).

<sup>46</sup> Reply of Dr Deckers, qs. 20 and 28; Reply of Dr Paulin, qs. 20 and 28.

<sup>47</sup> New Zealand's comments on the experts' replies, para. 68.

<sup>48</sup> New Zealand's first written submission, paras. 4.23, 4.243 and 4.246. See also: Australia's first written submission, paras. 473 and 476. Australia makes this point in its comments on the experts' replies, footnote 125.

## C. QUESTIONS SPECIFIC TO EUROPEAN CANKER

### (a) Probability of entry

30. Unlike New Zealand, Australia did not specifically address the experts' replies on the infestation of mature apple fruit, including those relating to Importation steps 3, 5 and 7.<sup>49</sup> However, this should not be taken as acceptance by Australia of any criticisms by the experts in relation to this aspect of the Final IRA Report. Rather, it reflects the fact that, according to the Final IRA Report, “[t]he risk scenario in respect to *N. galligena*, when importing apple fruit, is primarily any latent infection in fruit that would not have been detected at harvesting or during processing in the packing house.”<sup>50</sup> While the IRA Team also considered surface infestation of mature apple fruit, Importation steps 3, 5 and 7 were clearly only of minor significance to their analysis.<sup>51</sup>

31. New Zealand has referred to several experts' replies which suggest that the IRA Team should have “disregarded” certain aspects of its risk assessment for European canker.<sup>52</sup> However, in Australia's view, New Zealand's reliance on these criticisms overlooks the role of the IRA Team's expert judgment in undertaking the risk assessment, as well as the inevitable data constraints when undertaking a risk assessment as part of a quarantine regulatory system. Moreover, Australia recalls that, according to the Appellate Body, it is not the role of the experts in WTO SPS disputes to advise whether they would have done the risk assessment in the same way as the IRA Team.

32. Finally, in a number of instances New Zealand has sought to rely on Dr Sgrillo's responses in relation to the Panel's European canker questions.<sup>53</sup> Dr Sgrillo's responses appear to be partially based on his opinion about the biology of *N. galligena* and the operation of the apple industry in both Australia and New Zealand. As Dr Sgrillo was appointed to assist the

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<sup>49</sup> New Zealand's comments on the experts' replies, paras. 85-89, 94-97 and 102-105.

<sup>50</sup> Final IRA Report, Part B, p. 118. (emphasis added)

<sup>51</sup> The risk scenario section of the European canker chapter of the Final IRA Report only includes a single sentence on infestation which simply states that “[a]ny infestation on the surface of the fruit that later gains entry into the fruit and causes infection may also be of concern”: Final IRA Report, Part B, p. 118. (emphasis added)

<sup>52</sup> Reply of Prof Swinburne, qs. 77/78/79; Reply of Prof Latorre, qs. 50, 57, 77, 81, 83 and 138.

<sup>53</sup> New Zealand's comments on the experts' replies, paras. 81, 89, 93, 97, 101, 108 and 124.

Panel’s understanding of risk assessment methodology, and not European canker, the Panel should rely on Dr Sgrillo’s advice only to the extent that it remains within his appointed field of expertise. As New Zealand itself notes, statements outside the areas for which experts were appointed “should be treated with care”.<sup>54</sup> For example, in relation to Importation step 5, Dr Sgrillo fails to fully appreciate the potential for the contamination of clean fruit in the dump tank in “the real world”<sup>55</sup> during processing at New Zealand packing houses.<sup>56</sup>

i. Importation step 2

33. In Australia’s view, New Zealand has misrepresented the experts’ position by asserting that the “experts confirm that ... there is insufficient scientific evidence of the occurrence of latent infections in mature New Zealand apple fruit”.<sup>57</sup> This assertion does not sit comfortably with Prof Swinburne’s and Prof Latorre’s acceptance that *N. galligena* may occasionally cause latent fruit infection in New Zealand.<sup>58</sup>

34. Australia also wishes to clarify New Zealand’s description of Importation step 2.<sup>59</sup> In fact, this step relates to the likelihood *that picked fruit* is infested/infected with *N. galligena*. The Final IRA Report explicitly acknowledges that rotten fruit would not be picked.<sup>60</sup>

**(b) Proximity and exposure**

i. New Zealand has misrepresented the IRA Team’s exposure analysis

35. Australia is concerned that New Zealand has misrepresented the IRA Team’s exposure analysis in several important respects when commenting on the expert replies.

36. First, New Zealand erroneously asserts that the IRA Team’s exposure analysis is based on an assumption that “all infected fruit will rot and produce spores”.<sup>61</sup> This is incorrect. In fact,

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<sup>54</sup> New Zealand’s comments on the experts’ replies, para. 4.

<sup>55</sup> Reply of Dr Sgrillo, q. 84.

<sup>56</sup> See Australia’s first written submission, paras. 587-593, including **Exhibit AUS-64**: Photograph of trash in a dump tank from a packing house in Hawkes Bay, New Zealand, 5/5/1999.

<sup>57</sup> New Zealand’s comments on the experts’ replies, para. 72.

<sup>58</sup> Reply of Prof Swinburne, qs. 54/55, 57, 62/63, 67/68 and 75; Reply of Prof Latorre, qs. 55, 57, 63 and 65.

<sup>59</sup> New Zealand’s comments on the experts’ replies, para. 70.

<sup>60</sup> Final IRA Report, Part B, p. 123.

<sup>61</sup> New Zealand’s comments on the experts’ replies, para. 113.

the IRA Team considered that *only some* rotting fruit would produce spores. This is evidenced by the Final IRA Report’s discussion of apple waste disposed of in landfills and compost.<sup>62</sup> It is clear from this discussion that the IRA Team considered that high temperatures, saprophytic microorganisms, insects, mammals and birds were all likely to impact on spore production.

37. Secondly, New Zealand also erroneously asserts the IRA Team’s exposure analysis is based on an assumption that “mummified apples will readily produce ascospores in the Australian climate”.<sup>63</sup> On the contrary, during the course of its analysis the IRA Team explicitly acknowledged that perithecia (ascospores) *rarely* develop on infected fruit.<sup>64</sup>

ii. The IRA Team was primarily concerned with conidia

38. Australia notes that New Zealand has referred to the following statement by Prof Swinburne:<sup>65</sup>

... by stating ‘*a significant exposure factor for N. galligena is the fact that the fungus has a specific mechanism for spore dispersal*’ in the conclusion on [exposure] p 138 [of the Final IRA Report], suggests that the outcome was heavily reliant on the erroneous presumption that rotted fruit would release ascospores.<sup>66</sup>

39. While the IRA Team considered both ascospores and conidia in relation to exposure, they were primarily concerned with conidia, and ascospores were only of minor significance to their analysis.<sup>67</sup> This is evidenced by the IRA Team’s acceptance that perithecia *rarely* develop on infected fruit.<sup>68</sup> It is also evidenced by the fact that conidia are the only spores expressly mentioned in the IRA Team’s analysis of the various exposure groups. In this regard, Australia notes the following statement by the IRA Team in relation to the “household and garden plants” exposure group: “Consumers disposing of fruit waste into a backyard compost heap may present an opportunity for exposure of conidia spores to host plants in the garden.”<sup>69</sup>

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<sup>62</sup> Final IRA Report, Part B, p. 135.

<sup>63</sup> New Zealand’s comments on the experts’ replies, para. 116.

<sup>64</sup> Final IRA Report, Part B, p. 135.

<sup>65</sup> New Zealand’s comments on the experts’ replies, para. 117.

<sup>66</sup> Reply of Prof Swinburne, qs. 84, 85. (original emphasis)

<sup>67</sup> Final IRA Report, Part B, p. 134-138.

<sup>68</sup> Final IRA Report, Part B, p. 135.

<sup>69</sup> Final IRA Report, Part B, p. 138. (emphasis added)

40. Accordingly, Prof Swinburne's interpretation of the last sentence in the IRA Team's conclusion on exposure<sup>70</sup> is not correct, and as a result New Zealand's reliance on it is misguided. The phrase "specific mechanism for spore dispersal" used in this sentence is primarily directed at the various means by which conidia can be dispersed by rain-splash and wind-driven rain. It needs to be distinguished from the phrase "specific mechanism for spore release" which more appropriately covers the forcible discharge of ascospores from perithecia.

iii. Dispersal of spores all year round

41. New Zealand refers to a statement by Prof Swinburne<sup>71</sup> suggesting that the IRA Team made an erroneous assumption that "discarded apples discharge spores all year".<sup>72</sup> Australia rejects New Zealand's assertion that this statement identifies a "key weakness" in the IRA Team's exposure analysis.<sup>73</sup>

42. Contrary to what Prof Swinburne appears to believe, and New Zealand repeats, the IRA Team *did not* assume that inoculum (spores) on discarded apples will always be available for infection of hosts in Australia. In fact, the exposure section in the Final IRA Report<sup>74</sup> discusses a range of factors that must be met in order for spores to be produced on rotting fruit. In particular, Australia notes the IRA Team's consideration of environmental factors which explicitly refers to the fact that "[c]limatic conditions are critical for disease development, both for inoculum production and infection by *N. galligena*".<sup>75</sup> Accordingly, the IRA Team's conclusion on exposure assumes that spores would *only rarely* be available on rotting fruit when conditions are suitable,<sup>76</sup> and therefore New Zealand's reliance on Prof Swinburne's statement is misguided.

43. In any event, Australia notes that New Zealand has never raised such a criticism of the Final IRA Report previously in these proceedings, and it cannot now rely on the experts' responses to make an argument it has failed to make.

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<sup>70</sup> Final IRA Report, Part B, p. 138.

<sup>71</sup> New Zealand's comments on the experts' replies, para. 125.

<sup>72</sup> Reply of Prof Swinburne, qs. 84, 85. See also reply of Prof Swinburne's, q. 66.

<sup>73</sup> New Zealand's comments on the experts' replies, para. 122.

<sup>74</sup> Final IRA Report, Part B, p. 134-138.

<sup>75</sup> Final IRA Report, Part B, p. 137. (emphasis added)

<sup>76</sup> Final IRA Report, Part B, pp. 138-139.

**(c) Establishment and spread**

44. Australia wishes to clarify that the IRA Team did not arrive at a single conclusion on the probability of establishment and spread, contrary to what New Zealand appears to suggest.<sup>77</sup> Instead, the IRA Team assigned separate *partial* probabilities of establishment (PPE) and separate *partial* probabilities of spread (PPS) to each of the four exposure groups. These *partial* probabilities are set out in Table 34 of the Final IRA Report.<sup>78</sup>

**(d) Conclusion**

45. In light of the above discussion, Australia rejects New Zealand’s assertion that the expert responses confirm that the IRA Team’s risk assessment for European canker is “fundamentally flawed”.<sup>79</sup> In fact, in many respects the experts’ replies support the IRA Team’s risk assessment. Moreover, both Prof Latorre and Prof Swinburne appear to accept Australia’s requirement that apples be sourced from export orchards free of European canker (i.e. pest free places of production) is a reasonable risk mitigation measure.<sup>80</sup>

**D. QUESTIONS SPECIFIC TO APPLE LEAFCURLING MIDGE (ALCM)**

46. New Zealand claims that:

Professor Cross confirms that the August 2005 data only “... gives the frequency of occurrence of occupied cocoons” ...<sup>81</sup>

Australia considers it inappropriate for New Zealand to have claimed that Professor Cross “confirmed” this particular fact. New Zealand itself provided the advice that “[t]he data presented gives the incidence of occupied cocoons”<sup>82</sup> in response to a request for clarification from Professor Cross. Accordingly, Professor Cross merely accepted New Zealand’s statement rather than “confirmed” it.

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<sup>77</sup> New Zealand’s comments on the experts’ replies, para. 127.

<sup>78</sup> Final IRA Report, Part B, p 144.

<sup>79</sup> New Zealand’s comments on the experts’ replies, para. 142.

<sup>80</sup> Reply of Prof Latorre, Guideline (g); Reply of Prof Swinburne, qs. 62/63.

<sup>81</sup> New Zealand’s comments on the experts’ replies, para. 160. (emphasis added)

<sup>82</sup> New Zealand’s response to the experts’ requests for factual clarification, q. 2(e).

47. New Zealand also claims that:

The expert responses confirm New Zealand's position that a key factor in the likelihood of establishment of ALCM is the likelihood of large numbers of apples being dumped together as waste near apples trees with newly unfurling leaves.<sup>83</sup>

Professor Cross' opinion that the issue of waste fruit was of importance<sup>84</sup> was in response to a direct question about whether the IRA Team's consideration of the potential for orchard wholesaler waste to be left uncovered was objective and credible. However, contrary to New Zealand's implication above, he did not express the view that the key scenario to be considered was apples being dumped as waste. Nor did he express an opinion about the likelihood of large numbers of apples being dumped together near apple trees in Australia.

48. Finally, New Zealand asserts that:

The expert responses also confirm that fruit waste in Australia would be extremely unlikely to be left in a condition conducive to ALCM emergence, mating and/or egg laying.<sup>85</sup>

New Zealand failed to explain the basis on which it considered that the experts' replies regarding how waste fruit would be handled in Australia confirm this point to the Panel. In any event, Australia has already questioned whether the experts could be expected to have expert knowledge of waste fruit handling practices in Australia.<sup>86</sup> Further, Australia is unable to see where any of the experts' comments refer to the link between fruit waste and conditions "conducive to ALCM emergence, mating and/or egg laying."

### III. CONCLUSION

49. New Zealand has been selective in drawing on the experts' replies and has only identified statements which appear to support its case, while not engaging on key issues raised by the experts which do not accord with its position. Further, in many cases, New Zealand has relied on the experts' responses to advance new arguments that it has not made before. This is incompatible with the principle that New Zealand, as the complainant, bears the burden of proof.

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<sup>83</sup> New Zealand's comments on the experts' replies, para. 172. (emphasis added)

<sup>84</sup> See: Reply of Prof Cross, q. 121.

<sup>85</sup> New Zealand's comments on the experts' replies, para. 182.

<sup>86</sup> Australia's comments on the experts' replies, para. 174.



50. In sum, there is no merit to New Zealand's assertions that the experts' replies demonstrate serious flaws in the Final IRA Report.