evaluate the *relative* effectiveness of requiring that export orchards be free of fire blight, compared to other measures, in reducing the overall risk of disease.

(3) With respect to the establishment of buffer zones, Japan cites evidence on buffer zones that is irrelevant to the likelihood of fire blight transmission on mature, symptomless apple fruit¹⁸² and makes no assessment of the relative effectiveness of this measure on reducing the overall disease risk.¹⁸³

(4) With respect to the three orchard inspections at blossom, fruitlet, and harvest season, Japan describes the possibility of confirming the presence of fire blight on apple trees, particularly at the blossom and small fruit seasons.¹⁸⁴ However, Japan cites no evidence that inspections are necessary at each of these three seasons¹⁸⁵ and makes no assessment of the relative effectiveness of this measure on reducing the likelihood of entry or overall disease risk.

(5) With respect to the post-harvest surface treatment of exported apples with chlorine, Japan states that "[b]y these measures, it is adequately possible to sterilize fire blight bacteria that may have attached to the surface of fresh apple fruits."¹⁸⁶ Japan cites one source in support, a confirmatory test of Japan's required treatment conducted by New Zealand in 1992 at Japan's request. Japan failed to mention the results of the confirmatory tests that Japan required the United States to conduct in 1993 to obtain approval of the Japanese export protocol for U.S. apples¹⁸⁷ or other published literature.¹⁸⁸

- ¹⁸³ See 1999 Japanese Pest Risk Analysis, § 3-2-2-1, at 25-26 (Exhibit USA-3).
- ¹⁸⁴ 1999 Japanese Pest Risk Analysis, § 3-2-2-1, at 26 (Exhibit USA-3).
- ¹⁸⁵ See supra § IV.A.4.C (discussing lack of evidence supporting three orchard inspections).
- ¹⁸⁶ 1999 Japanese Pest Risk Analysis, § 3-2-2-2, at 26-27 (Exhibit USA-3).

¹⁸⁷ See Letter from B. Lee, U.S. Department of Agriculture, to M. Yoshimura, Ministry of Agriculture, Forestry, and Fisheries (December 2, 1993) (enclosing report entitled "Effectiveness of Chlorine to Eliminate *Erwinia amylovora* from the Surfaces of Contaminated Mature, Healthy-appearing Apple Fruit") (Exhibit USA-22); Letter from M. Yoshimura, Ministry of Agriculture, Forestry & Fisheries to B. Lee, U.S. Department of Agriculture, at 1 (February 9, 1994) (U.S. translation) ("As a result of the test, it was confirmed that the treatment with oneminute immersion of fresh apples into 100 [parts per million] chlorine *is effective as a treatment against fire blight pathogen attached to fruit.*") (emphasis added) (Exhibit USA-23).

¹⁸⁸ See, e.g., R.G. Roberts & S.T. Reymond, Evaluation of post-harvest treatments for eradication of Erwinia amylovora from apple fruit, Crop Protection 8: 283-88 (1989).

¹⁸² See supra § IV.A.4.B (discussing irrelevance of Japanese evidence relating to the "fire blight *eradication* program in Europe," protection zones "around *seedling* orchard under EPPO fire blight free program," and buffer zones for citrus canker on "Onshu *tangerines* exported from Japan to the United States").

Japan makes no assessment, moreover, of the *relative* effectiveness of this measure on reducing the likelihood of entry or overall disease risk.

(6) With respect to chlorine treatment of containers for harvesting, Japan claims that the requirement is necessary to avoid contamination of fruit by contaminated harvest containers.¹⁸⁹ The evidence Japan cites is circumstantial, not direct or scientific evidence, and Japan makes no assessment of the relative effectiveness of this measure on reducing the likelihood of entry or overall disease risk.¹⁹⁰

(7) With respect to chlorine treatment of the packing site, which Japan asserts is a "safety measure[]" to prevent contamination of fruit by packing line equipment in the packing facility,¹⁹¹ Japan simply does not present any evidence in support of this statement nor evaluate the relative effectiveness of this measures in reducing the overall disease risk.

Thus, by failing to evaluate the relative effectiveness of those SPS measures it *has* identified,¹⁹² Japan's assessment of risks "does not contain the required evaluation of the likelihood of entry, establishment, or spread of the diseases of concern according to the SPS measures which might be applied" and does not fulfil the third requirement for a risk assessment within the meaning of Article 5.1.¹⁹³

86. The Japanese Pest Risk Analysis suffers from another terminal flaw in that it inadequately considers the SPS measures "which might be applied." Specifically, Japan considers *only* those measures which it *already applied* restricting the importation of U.S. apples. As Japan states: "[I]t is necessary to review whether the 'plant quarantine measures of fire blight bacteria concerning fresh U.S. apple fruit' which our country has taken based on the US government suggestions are appropriate alternative measures to lift the fire blight importation prohibition."¹⁹⁴ However, the United States notes that long ago it informed Japan that measures on mature, symptomless apples were not necessary because these fruit do not serve as a pathway for the

¹⁸⁹ 1999 Japanese Pest Risk Analysis, § 3-2-2-2, at 26 (Exhibit USA-3).

¹⁹⁰ See supra § IV.A.4.F (discussing lack of scientific evidence supporting requirement).

¹⁹¹ 1999 Japanese Pest Risk Analysis, § 3-2-2-2, at 27 (Exhibit USA-3).

¹⁹² The United States notes that, in its risk assessment, Japan did not identify all of the fire blight measures it imposes. Japan does not identify the post-harvest separation of apples for export to Japan from those apples for other destinations, *see* MAFF Detailed Rules §§ 6, 7(1) (August 22, 1994) (Exhibit USA-13), and therefore does not present evidence in support nor assess its relative effectiveness.

¹⁹³ Australia – Salmon (AB), paras. 133-34.

¹⁹⁴ 1999 Japanese Pest Risk Analysis, § 3-1, at 24 (Exhibit USA-3).

disease¹⁹⁵ and that it proposed compromise alternative measures to Japan in 1996-97.¹⁹⁶ Japan failed to consider these alternative measures proposed by the United States, despite the facts that no other fire blight-free countries impose the same fire blight measures as Japan – indeed, the vast majority impose no fire blight measures on imported fruit all – and yet, no instance of mature, symptomless fruit transmitting the disease has been documented.¹⁹⁷

87. Thus, to the extent that Japan did not evaluate the likelihood of entry, establishment, or spread of fire blight according to SPS measures which might be applied that were not *already* being applied by Japan, Japan's assessment of risks does not meet the third requirement of a risk assessment within the meaning of Article 5.1 and Annex A of the SPS Agreement.

4. The Japanese Pest Risk Analysis Does Not Reasonably Support the Measures Taken

88. The United States has demonstrated that the Japanese Pest Risk Analysis is inconsistent with Article 5.1 of the SPS Agreement because Japan has neither evaluated the likelihood of entry, establishment, or spread of fire blight *nor* evaluated the likelihood of entry, establishment, or spread of fire blight according to the SPS measures which might be applied. The Japanese Pest Risk Analysis is also inconsistent with Article 5.1 because the results do not "sufficiently warrant – that is to say, reasonably support – the SPS measure."¹⁹⁸

89. As stated earlier, the International Plant Protection Convention Standard on Pest Risk Analysis for Quarantine Pests makes clear that the probability of entry of a pest is linked to the "probability of the pest being associated, spatially or temporally, with the pathway at origin," considering, for example, the prevalence of the pest in the source area, the occurrence of the pest in a life-stage that would be associated with commodities, seasonal timing, and commercial procedures applied at the place of origin, such as handling, culling, roguing, and grading.¹⁹⁹

¹⁹⁸ *EC-Hormones*, WT/DS26/AB/R, para. 193 ("[T]he results of the risk assessment must sufficiently warrant-that is to say, reasonably support-the SPS measure.").

¹⁹⁹ International Plant Protection Convention, Pest Risk Analysis for Quarantine Pests § 2.2.1.2, at 13 (2001) (International Standards for Phytosanitary Measures Publication No. 11) (Probability of the pest being associated with the pathway at origin) (Exhibit USA-15).

¹⁹⁵ See Letter from B. Lee, U.S. Department of Agriculture, to M. Yoshimura, Ministry of Agriculture, Forestry, and Fisheries, Attached Report, p. 2 (December 2, 1993) ("The failure to detect *Erwinia amylovora* on the uninfested (negative control) fruit is consistent with previous results and conclusions that the bacterium is not present on mature, healthy-appearing fruit. This further supports the conclusion that mature, healthy-appearing fruit are not vectors for the dissemination of *Erwinia amylovora*.") (Exhibit USA-22); *see also infra* § IV.D (claim under Article 5.6 of the SPS Agreement).

¹⁹⁶ See Exhibit USA-1, para. 3 (chronology of U.S. efforts to resolve the dispute bilaterally).

¹⁹⁷ See Exhibit USA-14 (detailing fire blight restrictions on imported apples in fire blight-free areas).

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Thus, to support measures on the importation of apples, the Japanese Pest Risk Analysis should have examined whether the *exported commodity* (mature, symptomless apple fruit) may serve as a pathway for the disease. However, Japan merely presents a list of scientific studies on the presence of fire blight bacteria on apples without any evaluation of the relevance of the studies for the apples sought to be imported.²⁰⁰ Such an unreasoned recitation of evidence cannot "reasonably support" the SPS measures Japan has imposed.

90. An evaluation of the likelihood of entry of fire blight bacteria through imported U.S. apples would, *inter alia*, distinguish scientific studies that isolate bacteria on mature apple fruit from those that isolate bacteria on immature apple fruit; would distinguish studies that find infected fruit (that is, those with endophytic or internal bacteria) from those that find infested fruit (that is, those with epiphytic or external bacteria); and would distinguish those studies that tested symptomless fruit from those that tested visibly damaged or infected fruit. Once having made these distinctions in the scientific evidence, a proper evaluation would then assess the probability that the apple fruit to be imported would result in entry of fire blight bacteria, which forms one part of an analysis of the risks to plant life or health arising from the entry, establishment, or spread of fire blight bacteria and fire blight disease.

91. The Japanese Pest Risk Analysis does not draw these distinctions; indeed, it does not discuss (and seeks to minimize) those studies that *expressly* evaluate the likelihood of bacterial presence on the goods sought to be imported (that is, mature and symptomless apple fruit).²⁰¹ The reliance on scientific studies irrelevant to these fruit means that the evaluation of entry in the Japanese Pest Risk Analysis is deeply flawed, and the resulting analysis of the risk posed by imported apples does not "sufficiently warrant" or "reasonably support" the Japanese fire blight measures.

92. The Japanese Pest Risk Analysis also does not present *any* evidence relating to the probability of survival of fire blight bacteria during commercial handling, storage, and transport (steps 2, 3, and 4 of the International Plant Protection Convention's guidelines for evaluating the probability of entry), which as the United States has noted is very low.²⁰² Neither does the Japanese Pest Risk Analysis present *any* evidence of the existence of a vector or the probability of bacterial transfer to a suitable host (steps 5 of the International Plant Protection Convention's guidelines for evaluating the probability of entry), which the United States has noted does not

²⁰² See supra § IV.A.3.C.

²⁰⁰ See 1999 Japanese Pest Risk Analysis, § 1-1, at 9 (Exhibit USA-3).

²⁰¹ See, e.g., Japanese Pest Risk Analysis, § 1-1, at 10 ("[T]here are *some reports* that the possibility of fire blight transmission by fresh apple fruit can be denied or neglected. However, in these reports, they *only* stated that *'symptomless, mature fruit'* (McLarty 1922, Dueck 1974), 'healthy looking mature fruit' (Roberts et al. 1989), 'fruit harvested from symptomless orchards with[out] fire blight' (van der Zwet et al. 1990) *are safe.*") (emphasis added) (Exhibit USA-17).

exist. Again, the resulting analysis of the risk posed by imported apples does not "sufficiently warrant" or "reasonably support" the Japanese fire blight measures.

93. If the United States were trying to export immature or symptomatic fruit to Japan, the Japanese Pest Risk Analysis would at least relate to measures on the importation of such fruit. However, it does not support measures on the exported commodity – mature, symptomless apples – because it does not analyze whether such fruit are a pathway for transmitting the disease. Thus, the Japanese measures are not based on a risk assessment within the meaning of Article 5.1 of the SPS Agreement.

5. Japan Has Acted Inconsistently With Article 5.1 and Therefore With Article 2.2

94. In *Australia – Salmon*, the Appellate Body affirmed a finding by the Panel as to the relationship between Articles 5.1 and 2.2. The Panel reasoned that, "in the event a sanitary measure is not based on a risk assessment as required in Article 5.1 and 5.2, this measure can be presumed, more generally, not to be based on scientific principles or to be maintained without sufficient scientific evidence."²⁰³ The Appellate Body agreed, concluding that, by maintaining an SPS measure "in violation of Article 5.1, Australia has, by implication, also acted inconsistently with Article 2.2 of the *SPS Agreement*."²⁰⁴ Thus, to the extent the Panel finds that Japan has maintained the fire blight measures without basing them on a risk assessment under Article 5.1, the Panel should also conclude that Japan has acted inconsistently with Article 2.2.

6. Conclusion: Japan Has Acted Inconsistently with Article 5.1 of the SPS Agreement

95. The United States has demonstrated that the Japanese fire blight measures are not based on a risk assessment because Japan's assessment of risks does not satisfy the definition of a "risk assessment" under the SPS Agreement. While Japan has suggested that its fire blight measures are based on the International Plant Protection Convention Standard for "Pest Risk Analysis for Quarantine Pests," Japan's assessment of risks falls far short of the careful analysis in that Standard. Therefore, by failing to make a proper assessment of risks and to base its fire blight measures on such an assessment, Japan has acted inconsistently with Articles 5.1 and 2.2 of the SPS Agreement.

²⁰³ Australia – Salmon (Panel), para. 8.52.

²⁰⁴ Australia - Salmon (AB), para. 138.

C. By Failing to Take Into Account Certain Information in Its Assessment of Risks, Japan Has Acted Inconsistently with Article 5.2 of the SPS Agreement

96. The Japanese Pest Risk Analysis is also flawed because it does not "take into account" certain information identified in Article 5.2 of the SPS Agreement. Article 5.2 sets out certain information that must be taken into account when conducting a risk assessment, including "available scientific evidence; . . . relevant ecological and environmental conditions; and quarantine or other treatment."²⁰⁵ The Japanese Pest Risk Analysis presents some information relating to fire blight, for example, biological information relating to the fire blight bacterium (*Erwinia amylovora*), studies on the presence of fire blight on apples,²⁰⁶ the presence of fire blight host plants in Japan, Japanese climatic conditions, and the historical record of fire blight expansion in other countries.²⁰⁷ However, Japan has also failed to take into account certain key pieces of information as required by Article 5.2.

97. Japan has failed to take into account available scientific evidence that mature, symptomless apple fruit do not serve to transmit the fire blight disease. As described at some length earlier,²⁰⁸ the scientific evidence indicates that exported apples have never transmitted and are not a pathway for the disease. The most recent scientific review for a reference book on fire blight states:

[I]t has never been demonstrated that mature fruit are involved in the dissemination of *Erwinia amylovora* and serve as a source of new infections in orchards. It would be extremely unlikely that contaminated fruit could be responsible for establishing new outbreaks of fire blight.²⁰⁹

²⁰⁸ See supra § IV.A.2, 3 (claim under Article 2.2 of the SPS Agreement).

²⁰⁹ S.V. Thomson, *Epidemiology of Fire Blight, in* Fire Blight: The Disease and Its Causative Agent, *Erwinia amylovora*, at 17 (2000) (J.L. Vanneste, ed.) (Exhibit USA- 2).

²⁰⁵ In full, Article 5.2 reads: "In the assessment of risks, Members shall take into account available scientific evidence; relevant processes and production methods; relevant inspection, sampling and testing methods; prevalence of specific diseases or pests; existence of pest- or disease-free areas; relevant ecological and environmental conditions; and quarantine or other treatment."

²⁰⁶ As noted, of course, much of that fruit was immature, visibly infected or damaged, or artificially wounded and inoculated, and therefore irrelevant to the assessment of the risk of transmission of fire blight through the exported commodity, mature, symptomless apple fruit. *See supra* § IV.B.2.A (Likelihood of Entry: Evidence not Evaluated).

²⁰⁷ See supra § IV.B.2 (claim under Article 5.1 of the SPS Agreement).

Notably, this reference work was published in 2000 and therefore surveyed the same scientific evidence that was available to Japan in making its 1999 Pest Risk Analysis.²¹⁰ The fact that Japan did not cite to, discuss, or distinguish the extensive scientific evidence that mature, symptomless apple fruit are not a pathway for the fire blight disease reveals that Japan has not "taken into account" important scientific evidence that contradicted its conclusion. Thus, Japan has acted inconsistently with Article 5.2.

98. Japan has failed to take into account relevant ecological and environmental conditions in the U.S. States of Washington and Oregon that bear on the likelihood that mature, symptomless apples will be infected or infested with fire blight bacteria. Japan expressly limits the importation of U.S. apples to fruit harvested from orchards in Washington and Oregon but failed to consider the available scientific evidence relating to mature, symptomless apples harvested from Washington.²¹¹ In fact, close to half of all the mature, symptomless apples that have been tested for the internal or external presence of fire blight bacteria were harvested from orchards throughout the apple-producing areas of Washington. These studies reveal that not a single mature, symptomless Washington apple fruit has ever tested positive for internal or external fire blight bacteria, even when those fruit have been harvested from infected trees.²¹² One study suggests that this may be linked to the climatic conditions found in apple-producing areas of Washington.²¹³ Japan did not identify and discuss the available scientific evidence relating to ecological and environmental conditions in the only U.S. States from which Japan had determined apple fruit could be exported. Thus, by failing to take into account relevant ecological and environmental conditions in the areas from which U.S. apples are currently exported, Japan acted inconsistently with Article 5.2.

99. Japan also did not take into account quarantine or other treatment that bears on the likelihood that mature, symptomless apples will be externally contaminated with fire blight bacteria. One of the fire blight measures currently imposed by Japan is a treatment of fruit with 100 parts per million chlorine for one minute. In the 1999 Pest Risk Analysis, Japan states that "[b]y these measures, it is adequately possible to sterilize fire blight bacteria that may have attached to the surface of fresh apple fruits."²¹⁴ However, Japan does not consider whether the chlorine treatment *by itself* suffices to mitigate the possibility (however small) that bacteria could

²¹³ See, e.g., R.G. Roberts et al., *Evaluation of Mature Apple Fruit from Washington State for the Presence of* Erwinia amylovora, Plant Disease 73: 917-21, at 920 (1989) (climatic conditions during latter parts of growing season in Washington may contribute to lack of recovery of epiphytic fire blight bacteria on mature fruit).

²¹⁴ 1999 Japanese Pest Risk Analysis, § 3-2-2-2, at 27 (Exhibit USA-3).

²¹⁰ See supra § IV.A.2 (discussing Roberts et al. (1998), European and Mediterranean Plant Protection Organization (1997), Thomson (1992), Roberts et al. (1989), Dueck (1974)).

²¹¹ See infra § IV.D.5 (claim under Article 5.6 of the SPS Agreement).

²¹² See supra § IV.A.3 (discussing Roberts (2002), van der Zwet et al. (1990), Roberts et al. (1989)).

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be found externally on mature, symptomless apple fruit. In fact, Japan does not discuss the results of an efficacy test of the chlorine treatment that it required the United States to perform prior to approval of the Japanese protocol for U.S. apples in 1994; the treatment completely eliminated all fire blight bacteria from apple fruit that had been artificially surface-contaminated with large numbers of bacteria.²¹⁵ Japan did not discuss this or other scientific evidence on the effect of chlorine treatment on the likelihood that mature, symptomless apples could be externally contaminated with fire blight bacteria.²¹⁶ Thus, by failing to take into account quarantine or other treatment, Japan has acted inconsistently with Article 5.2.

D. Japan's Measures Are Inconsistent with Article 5.6 of the SPS Agreement Because They Are More Trade-Restrictive than Required to Achieve Japan's Appropriate Level of Protection

1. Introduction and Legal Standard

100. The United States has demonstrated that the Japanese fire blight measures are maintained without sufficient scientific evidence and are not based on a risk assessment.²¹⁷ In this portion of its submission, the United States demonstrates that the Japanese fire blight measures are more trade-restrictive than required to achieve Japan's appropriate level of phytosanitary protection and that Japan has thus acted inconsistently with Article 5.6 of the SPS Agreement.

101. Article 5.6 of the SPS Agreement imposes an obligation on each WTO Member not to establish or maintain sanitary or phytosanitary measures that are more trade-restrictive than required to achieve its appropriate level of protection. The provision states:

Without prejudice to paragraph 2 of Article 3, when establishing or maintaining sanitary or phytosanitary measures to achieve the appropriate level of sanitary or phytosanitary protection, Members shall ensure that such measures are not more trade-restrictive than required to achieve their appropriate level of sanitary or phytosanitary protection, taking into account technical and economic feasibility.

²¹⁷ See supra §§ IV.A, B (claims under Articles 2.2 and 5.1 of the SPS Agreement).

²¹⁵ Letter from M. Yoshimura, Ministry of Agriculture, Forestry & Fisheries, to B.G. Lee, U.S. Department of Agriculture (February 9, 1994) ("As a result of the test [conducted by the United States at the request of Japan], it was confirmed that the treatment with one-minute immersion of fresh apples into 100 ppm chlorine is effective as a treatment against fireblight pathogen attached to fruit.") (Exhibit USA-23).

²¹⁶ See, e.g., R.G. Roberts & S.T. Reymond, *Evaluation of post-harvest treatments for eradication of* Erwinia amylovora *from apple fruit*, Crop Protection 8: 283-88 (1989) (finding that chlorine treatment reduced bacterial cell counts on artificially inoculated fruit from hundreds of millions pre-treatment to the range of 13-38 post-treatment).

The footnote to Article 5.6 clarifies:

For purposes of paragraph 6 of Article 5, a measure is not more trade-restrictive than required unless there is another measure, reasonably available taking into account technical and economic feasibility, that achieves the appropriate level of sanitary or phytosanitary protection and is significantly less restrictive to trade.

102. In *Australia – Salmon*, the Appellate Body agreed with the Panel that, reading Article 5.6 together with its footnote, there were three elements necessary "to establish a violation of Article 5.6." First, there must be a measure that "is reasonably available taking into account technical and economic feasibility." Second, the measure must achieve "the Member's appropriate level of sanitary or phytosanitary protection." Third, the measure must be "significantly less restrictive to trade than the SPS measure contested." If any one of the three elements is *not* met, "the measure in dispute would be consistent with Article 5.6."²¹⁸

103. There is an alternative measure that is reasonably available, achieves Japan's appropriate level of protection, and is significantly less restrictive to trade than the Japanese fire blight measures: restricting importation to mature, symptomless apple fruit. This measure follows from the scientific evidence that mature, symptomless apple fruit are not a pathway for the disease and thus will not result in transmission of fire blight to Japan. In the absence of any evidence that mature, symptomless apples transmit the disease, Japan has imposed fire blight measures that are more trade-restrictive than required to achieve its appropriate level of protection, inconsistently with Article 5.6 of the SPS Agreement.

2. Japan's Appropriate Level of Protection

104. In order to gauge whether an alternative measure achieves Japan's appropriate level of protection, it is necessary first to see whether Japan has identified the appropriate level of protection – as Japan is required to do under the SPS Agreement.²¹⁹ At consultations, Japan indicated that its appropriate level of protection was a level of protection that would allow Japan to prevent introduction of fire blight and maintain its fire blight-free status.²²⁰ Japan also stated that its appropriate level of protection is that referred to in its 1999 Pest Risk Analysis. That

²¹⁸ Australia – Salmon (AB), para. 194; see Australia – Salmon, (Panel), para. 8.167.

²¹⁹ Australia – Salmon (AB), paras. 205-06 (finding that there is an implicit obligation in the SPS Agreement to define the appropriate level of protection with sufficient precision so that the application of relevant provisions of the SPS Agreement is possible).

²²⁰ See U.S. Consultation Question 10 (Exhibit USA- 7).

document states that "the plant quarantine measures for fire blight bacteria regarding U.S. apple fruits are alternative measures that can be implemented which provide the same level of protection as outright import prohibition regarding fire blight bacteria prescribed in Annexed Table 2 of Plant Protection Law Enforcement Regulations, in accordance with the import prohibition regulations in Article 7 of Plant Protection Law."²²¹

105. There is some question whether Japan has defined its appropriate level of protection with a sufficient degree of precision,²²² although one could assume that Japan is claiming an extremely conservative approach to risk. In this dispute, however, the precise definition of Japan's appropriate level of protection is not crucial. Whatever Japan's level, given the scientific evidence that mature, symptomless apple fruit have never transmitted and do not transmit the disease, the alternative measure of restricting importation to mature, symptomless apple fruit achieves that level.

3. Japan May Restrict Importation to Mature, Symptomless Apple Fruit

A. The Measure Is Reasonably Available

106. Restricting the importation of apples to mature, symptomless apple fruit is a reasonably available measure. U.S. law and regulations already impose the requirement that exported apples be mature and be free from decay, broken skin or bruises, or damage caused by disease or any other means.²²³ Thus, the measure is technically feasible because the standards and procedures necessary to implement it already exist, and the measure is economically feasible because the costs of necessary inspection and grading are already being incurred. In addition, almost all (60 of 66) fire blight-free areas effectively impose only a mature, symptomless fruit measure on imported apples as they allow U.S. apples meeting U.S. export standards to be imported without

²²¹ 1999 Japanese Pest Risk Analysis, § 3-3-2, at 29 (emphasis added) (Exhibit USA-3); *see also* 1999 Japanese Pest Risk Analysis, § 2-3-2, at 23 ("Therefore, in order to avoid introduction of fire blight bacteria, our conclusion is that it is necessary to designate fire blight bacteria as *bacteria subject to import prohibition* in Plant Protection Law Enforcement Regulations Annexed Table 2.") (emphasis added).

²²² See Australia – Salmon (AB), paras. 205-06.

²²³ U.S. Export Apple Act, 7 U.S.C. § 581 (exported apple fruit must meet minimum Federal or State grade); United States Standards for Grades of Apples 7 C.F.R. § 51.302 (U.S. No. 1 grade requires that fruit be "mature but not overripe, carefully hand-picked, clean, fairly well-formed; free from decay, internal browning, internal breakdown, bitter pit, Jonathan spot, scald, freezing injury . . . and broken skin or bruises except those which are incident to proper handling and packing[;] free from damage caused by . . . sunburn or sprayburn, limb rubs, hail, drought spots, scars, stem or calyx cracks, disease, insects, [or] damage by other means").

any production restrictions or post-harvest treatments.²²⁴ Thus, a mature, symptomless apple fruit measure is reasonably available to Japan.

B. The Measure Achieves Japan's Appropriate Level of Protection

107. A mature, symptomless apple fruit measure achieves Japan's appropriate level of protection. There is no evidence that mature, symptomless apple fruit serve to transmit the bacterium. To the contrary, as the United States has previously demonstrated at some length, the scientific evidence establishes that apple fruit have never transmitted fire blight and are not a pathway for the disease.²²⁵ Billions of apple fruit have been shipped worldwide without a single instance of fire blight transmission via those fruit. Thus, restricting importation to mature, symptomless apple fruit would achieve Japan's appropriate level of protection by (in Japan's words) allowing Japan to prevent introduction of fire blight and maintain its fire blight-free status.

C. The Measure Is Significantly Less Trade-Restrictive

Restricting importation of U.S. apples to mature, symptomless fruit would be 108. significantly less restrictive to trade than the current Japanese fire blight measures. Under the current Japanese measures, no fruit harvested outside of Washington or Oregon may be exported to Japan; no fruit may be exported from an orchard containing even the slightest evidence of fire blight (for example, a blighted blossom or shoot at any time from blossom to harvest); no fruit may be exported from an orchard if any fire blight at all is detected in a 500-meter buffer zone surrounding the orchard (no matter how distant the fire blight source is from the harvested apples): three growing seasons inspections (at blossom, small fruit, and harvest seasons) must be conducted to ascertain whether the orchard and buffer zone are fire blight-free; and no fruit may be exported unless treated with chlorine post-harvest. Thus, a farmer seeking to export to Japan under the current fire blight measures could ensure that his or her orchard is fire blight-free but still be disqualified from exporting should fire blight be detected in the 500 meter buffer zone. which may even include property not under his ownership or control. This disqualification could occur as late as the harvest season inspection, that is, after the farmer has incurred all of the expenses related to the three growing season inspections and the orchard management necessary to maintain the orchard fire blight-free.

²²⁴ The United States notes that of 66 fire blight-free areas, 58 impose no measures on U.S. apples for fire blight. Of the other seven (Argentina, Australia, Brazil, Chile, Japan, Morocco, Chinese Taipei, and Uruguay), Morocco merely requires a phytosanitary certificate, which indicates that fruit is free of harmful organisms, including *Erwinia amylovora*, and Chinese Taipei merely requires a phytosanitary certificate and *either* a fruit freedom additional declaration or a chlorine dip. *See* Exhibit USA- 14 (table detailing fire blight measures on imported apples in fire blight-free areas).

²²⁵ See supra § IV.A.2, 3 (claim under Article 2.2 of the SPS Agreement).

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109. While an estimated one percent of apples are harvested from orchards that satisfy the Japanese fire blight measures,²²⁶ under the proposed alternative measure, by definition, *all* mature, symptomless apple fruit would qualify for export to Japan. A concrete example may also be instructive: U.S. export figures show that in 2001 the United States exported 87,528 metric tons of apples to Chinese Taipei, which is fire blight-free and does not impose fire blight measures as restrictive as those of Japan;²²⁷ in contrast, U.S. apple exports to Japan in 2001 totaled only 458 metric tons. Thus, restricting importation to mature, symptomless apple fruit is a measure that is significantly less restrictive to trade.

110. The fact that Japan's fire blight measures are more trade-restrictive than necessary is also evident from the range of possible measures that are less trade-restrictive and would more than achieve Japan's appropriate level of protection. Three such alternatives include requiring that imported mature, symptomless fruit be harvested in Washington or Oregon (a component of Japan's current fire blight measures), requiring that imported mature, symptomless fruit be harvested at least 10 meters from a source of inoculum (a component of the compromise proposal made by the United States in 1996-97),²²⁸ and requiring that mature, symptomless fruit be treated with chlorine (a component of Japan's current fire blight measures). Other alternatives could also be devised. Because the scientific evidence establishes that billions of exported apple fruit have never transmitted fire blight and mature, symptomless fruit are not a pathway for the disease, any of these less-trade-restrictive measures would more than achieve Japan's appropriate level of protection – although, for the same reason, they would be more trade-restrictive than necessary. Only a requirement that exported U.S. apples be mature and symptomless might be considered necessary given the scientific evidence.

D. Conclusion

111. The United States has demonstrated that a measure restricting importation to mature, symptomless apple fruit satisfies the three elements of Article 5.6: (1) it is reasonably available taking into account technical and economic feasibility; (2) it achieves Japan's appropriate level of phytosanitary protection by allowing Japan to prevent introduction of fire blight and maintain its fire blight-free status; and (3) it is significantly less restrictive to trade than the Japanese fire blight measures. Thus, Japan has not ensured that its fire blight measures are no more trade-

²²⁶ R.G. Roberts et al., *The Potential for Spread of* Erwinia amylovora *and fire blight via commercial apple fruit: a critical review and risk assessment*, Crop Protection 17: 19-28, at 24-25 (1998) (estimating that only 1 percent of apples originate in orchards that meet the requirements of the Japanese fire blight measures) (Exhibit USA-4).

²²⁷ Chinese Taipei requires a phytosanitary certificate plus a fruit freedom additional declaration *or* chlorine treatment. *See* Exhibit USA-14 (table detailing any fire blight measures on imported fruit in fire blight-free areas).

 $^{^{\}rm 228}$ For further background, see Exhibit USA-1 (chronology of U.S. efforts to resolve the dispute bilaterally).

restrictive than necessary to achieve its appropriate level of protection, inconsistent with its obligation under Article 5.6 of the SPS Agreement.

E. Japan Has Failed to Notify Changes to Its Fire Blight Measures and to Provide Information as Required by Article 7 and Annex B of the SPS Agreement

112. The SPS Agreement imposes an obligation on Members to notify changes to, and to provide basic information on, SPS measures to other Members. Despite years of bilateral discussions with Japan on its fire blight measures, Japan has not complied with its basic notification obligations under Article 7 and Annex B of the SPS Agreement, making it significantly more difficult for WTO Members to understand exactly what measures Japan imposes to address fire blight.

113. Article 7, entitled "Transparency," states that "Members shall notify changes in their sanitary or phytosanitary measures and shall provide information on their sanitary or phytosanitary measures in accordance with the provisions of Annex B." Annex B, entitled "Transparency of Sanitary and Phytosanitary Regulations," imposes requirements to publish SPS regulations, to create one enquiry point to provide information and documents related to SPS measures, and to notify the content of certain SPS measures. Paragraph 5 of Annex B requires that a Member publish a notice that a regulation is proposed to be adopted, notify other Members of the products to be affected and the objective and rationale of the measure, provide copies of the proposed measure upon request of another Member, allow reasonable time for Members to make comments, and discuss and take into account any such comments and discussions. Paragraph 7 of Annex B specifies that notifications are to be in an official WTO language.

114. Japan has substantively changed its fire blight measures since the entry into force of the SPS Agreement in 1995, and Japan has failed to notify these changes. Japan has identified four means by which it imposes its fire blight measures, Japan identified four distinct measures: (1) Plant Protection Law No. 151, Article 7; (2) Plant Protection Law Enforcement Regulations, Article 9 and Annexed Table 2; (3) MAFF Notification No. 354; and (4) MAFF "Detailed Rules for U.S. Apples."²²⁹ The latter two Japanese measures appear to have been amended or introduced since 1995 without being notified to WTO Members.

115. MAFF Notification No. 354, which sets the requirements for imports of U.S. apples, was issued on March 10, 1997. This Notification substantively amends MAFF Notification No. 1184, which was issued on August 22, 1994,²³⁰ and the most recent Detailed Rules for U.S. Apples states that "enforcement of plant quarantine requirements on fresh apples produced in the U.S. . . . shall be in accordance with the detailed rules set forth herewith, in addition to the

²²⁹ See U.S. Consultation Question 2 (Exhibit USA- 7).

²³⁰ MAFF Notification No. 354 (March 10, 1997) (Exhibit USA- 10).

standards established by the MAFF Notification No. 354 dated March 10, 1997."²³¹ Thus, because Notification No. 354 changes the Japanese fire blight restrictions and imposes a regulation not based on an international standard,²³² the Notification was required to be notified to WTO Members. It appears not to have been.

116. MAFF first established "Detailed Rules for U.S. Apples" in 1994 when the Japanese import ban on U.S. apples was lifted. However, the MAFF Detailed Rules were amended on April 1, 1997, to implement the changes resulting from the then newly-issued MAFF Notification No. 354.²³³ Because the April 1, 1997 Detailed Rules substantively amended the "Detailed Rules for U.S. Apples" issued on August 22, 1994, they were required to be notified to WTO Members but were not.

117. By failing to notify changes to its fire blight measures through the March 10, 1997 release of MAFF Notification No. 354 and the introduction of the April 1, 1997 Detailed Rules for U.S. Apples, Japan has acted inconsistently with Article 7 and Annex B, paragraphs 5 and 7, of the SPS Agreement.²³⁴

V. CONCLUSION

118. For the foregoing reasons, the United States respectfully requests that the Panel find that:

(1) Japan has failed to ensure that its fire blight measures are not maintained without sufficient scientific evidence and these measures are therefore inconsistent with Article 2.2 of the SPS Agreement;

²³³ The Detailed Rules have also been subsequently amended. For example, Circular 8103, dated January 29, 2002, contains revisions to the Detailed Rules for U.S. Apples incorporating CxT methodologies for approval of new varieties of fruit subject to fumigation requirements.

²³⁴ The United States also notes that it requested Japan at consultations to provide copies of all of its fire blight measures and also asked whether these copies could be provided in English. While Japan provided copies of some of these measures in the Japanese original and stated that it would provide copies of two measures (the Plant Protection Law and the Plant Protection Law Enforcement Regulations) in English after consultations, to date it has not provided any English-language copies.

²³¹ Detailed Rules for Plant Quarantine Enforcement Regulations of U.S. Apples (Circular 8103) (January 29, 2002) (chapeau) (revising Detailed Rules issued on August 22, 1994).

²³² Paragraph 5 of Annex B requires notification of a measure if "an international standard, guideline or recommendation does not exist or the content of a proposed sanitary or phytosanitary regulation is not substantially the same as the content of an international standard, guideline or recommendation." At consultations, the United States asked whether the Japanese fire blight measures were based on any international standard. Japan replied that the measures were based on the guidelines for pest risk analysis and the standards for SPS measures of the International Plant Protection Convention. Japan also stated that it was not aware of any international standards specific to fire blight and *Erwinia amylovora*. See U.S. Consultation Question 5 (Exhibit USA-7).

(2) Japan has failed to ensure that its fire blight measures are based on an assessment of the risks to plant life or health and therefore these measures are inconsistent with Article 5.1 of the SPS Agreement;

(3) in its assessment of risks, Japan has failed to take into account available scientific evidence, relevant ecological and environmental conditions, and quarantine or other treatment and therefore has acted inconsistently with Article 5.2 of the SPS Agreement;

(4) Japan has failed to ensure that its fire blight measures are not more trade-restrictive than required to achieve its appropriate level of phytosanitary protection, taking into account technical and economic feasibility, and these measures are therefore inconsistent with Article 5.6 of the SPS Agreement; and

(5) Japan has failed to notify changes in and information on its fire blight measures and therefore has acted inconsistently with Article 7 and Annex B of the SPS Agreement.

The United States further requests that the Panel recommend that Japan bring its measures into conformity with its obligations under the SPS Agreement.