Japan – Measures Affecting the Importation of Apples

(WT/DS245)

Executive Summary of the First Written Submission of the United States of America

September 11, 2002
I. INTRODUCTION

1. Japan prohibits the importation of apple fruit unless such apples are produced, treated, and imported in accordance with Japan’s highly-restrictive fire blight measures. The United States does not question that fire blight is a plant disease of serious biological and economic consequences nor Japan’s determination – as is its right – to enact measures to protect against the risks arising from transmission of fire blight disease within its territory. However, consistent with its obligations under the Agreement on the Application of Sanitary and Phytosanitary Measures (“SPS Agreement”), Japan may not restrict the importation of apples without scientific evidence that exported apples transmit the disease.

2. Billions of apples have been exported worldwide, most of which without any measures being imposed to protect against transmission of fire blight, yet there is no scientific evidence that such apples have ever transmitted the disease. Rather, the scientific evidence establishes that mature fruit are not involved in transmission of the disease. Thus, while Japan may impose measures to guard against transmission of the disease within its territory, it may not restrict imports of a commodity that are not in any way implicated in transmitting the disease.

3. Because mature, symptomless apples, the exported commodity, have never transmitted and do not transmit fire blight, Japan’s fire blight measures cannot be applied to imported U.S. apples, and Japan has acted inconsistently with Articles 2.2, 5.1, 5.2, 5.6, and 7 and Annex B of the SPS Agreement.

II. FACTUAL BACKGROUND

4. When asked at consultations to specify the means by which Japan maintains its fire blight measures, Japan identified four distinct measures: (1) Plant Protection Law No. 151 (May 4, 1950), Article 7; (2) Plant Protection Law Enforcement Regulations (June 3, 1950), Article 9 and Annexed Table 2; (3) Ministry of Agriculture, Forestry and Fisheries (MAFF) Notification No. 354 (dated March 10, 1997); and (4) MAFF “Detailed Rules for U.S. Apples.” Plant Protection Law No. 151 prohibits importation of “[p]lants designated by the Ministerial Ordinance.” Ministerial Ordinance No. 73, Japan’s Plant Protection Law Enforcement Regulations, lists such prohibited plants in Annexed Table 2, which designates “Live plants and plant parts (including fruit, flower and pollen, other than seed” of apple (genus Malus), “excluding those listed in Annexed List 24, 25, and 31” as prohibited to protect against “Fire blight (Erwinia amylovora).”

5. Paragraph 25 of the Annexed List to Table 2 of the Plant Protection Law Enforcement Regulations sets out conditions under which U.S. apples may be imported into Japan: “Fresh fruit of apple of Golden Delicious variety and Red Delicious variety which are shipped from the United States of America directly to Japan without calling at any port and which conforms to the standards established by the Ministry of Agriculture, Forestry and Fisheries.” The relevant standards are currently set by MAFF Notification No. 354 and related “Detailed Rules.”

6. MAFF Notification No. 354 and the Detailed Rules impose several restrictions on the importation of U.S. apple fruit in connection with fire blight or Erwinia amylovora: First, fruit is
prohibited unless produced in designated areas within the U.S. States of Washington or Oregon. Second, these designated areas must be inspected three times yearly (at blossom, fruitlet, and harvest stages) for the presence of fire blight. Third, fruit is prohibited unless the export orchard is free of plants infected with fire blight and free of host plants of fire blight (other than apples), whether or not infected. Fourth, fruit is prohibited unless a 500-meter buffer zone surrounding the export orchard is free of plants infected with fire blight. Fifth, fruit is prohibited unless subjected to a post-harvest surface treatment with chlorine. Sixth, fruit is prohibited unless produced according to specified requirements, such as chlorine treatment of containers for harvesting and chlorine treatment of the interior of the packing facility. Seventh, fruit is prohibited unless kept separated post-harvest from other fruit. Eighth, U.S. plant protection officials must certify or declare that fruit are free of quarantine pests, “are not infested/infected with . . . fire blight,” and were treated with chlorine. Ninth, Japanese officials must confirm that the U.S. official has made the necessary certification and that the chlorine treatment and orchard designations were properly made; Japanese officials must also inspect both the disinfestation and packing facilities.

III. LEGAL ARGUMENTS

A. The Measures Are Inconsistent with Article 2.2 of the SPS Agreement

7. The Japanese fire blight measures are inconsistent with Article 2.2 of the SPS Agreement because they are maintained “without sufficient scientific evidence.” There is no evidence that the apple fruit sought to be exported from the United States – that is, mature, symptomless apples – would transmit the fire blight disease to Japan. To the contrary, the scientific evidence shows that mature, symptomless apple fruit have never transmitted and do not transmit the disease. Thus, there is no evidence, let alone sufficient evidence, for Japan to maintain its fire blight measures.

8. This scientific evidence is borne out by real world experience. Billions of fruit have been shipped worldwide without a single documented instance of fire blight transmission via exported apple fruit. An infinitesimal portion of these exports were made under conditions as stringent as those set by the Japanese fire blight measures. In fact, of 66 fire blight-free countries, 58 impose no restrictions on imported fruit for fire blight at all. Thus, although nearly all trade in apple fruit occurs without any restrictions for fire blight, there is no evidence that fire blight has ever spread through exported apples.

9. U.S. export statistics illustrate the point well. Despite the fact that fire blight is geographically dispersed in the United States, the United States has exported 10,505,500 metric tons of apple fruit (or, assuming that there are 88 apples per 42 lb. box, approximately 48.5 billion apples) over the last 35 years, without a single instance of fire blight spread through exports of U.S. apple fruit in that time. Over these 35 years, moreover, the United States has exported 4,794,495 metric tons of apple fruit, or approximately 22.1 billion apples, to its top-ten fire blight-free export markets (Chinese Taipei, Hong Kong, Indonesia, Saudi Arabia, Thailand,
the United Arab Emirates, Malaysia, Venezuela, the Philippines, and Colombia) with no spread of fire blight through those exports. None of these markets imposes measures similar to the Japanese fire blight measures, and none of these areas has reported transmission of fire blight through imports of U.S. apple fruit.

10. Thus, because there is no scientific evidence that mature, symptomless apple fruit have transmitted the fire blight disease, despite billions of apple fruit imported without facing any restrictions for fire blight at all, there is no rational or objective relationship between the scientific evidence and the Japanese fire blight measures. By maintaining its fire blight measures without sufficient scientific evidence, Japan has acted inconsistently with Article 2.2 of the SPS Agreement.

11. Furthermore, the United States has examined and presented the scientific evidence underlying the fact that mature, symptomless apples do not serve as a “pathway” – that is, a means that allows the entry or spread of a pest – for the fire blight disease.

12. This scientific evidence indicates that: (1) fire blight bacteria are not associated internally with mature, symptomless apple fruit; (2) fire blight bacteria are rarely associated externally with mature, symptomless apple fruit, even when harvested from blighted trees and orchards; (3) even if a mature, symptomless apple were externally contaminated with bacteria, such bacteria are unlikely to survive normal commercial handling, cool storage, and transport of fruit; and (4) even if the imported commodity were externally contaminated with bacteria, there is no dispersal mechanism or vector to allow movement of such bacteria from the fruit to a suitable host. Because the chain of transmission – from association of bacteria with fruit (elements (1) or (2)) to bacterial survival of handling, storage, and transport (element (3)) to vectoring of bacteria to a suitable host (element (4)) – is never completed, imports of apple fruit are not a means of, and cannot result in, transmission of fire blight within Japan. Thus, because mature, symptomless apple fruit are not a pathway for the fire blight disease, there is no scientific basis to restrict imports of such fruit.

13. Therefore, because the scientific evidence establishes that apple fruit have never transmitted and do not transmit the disease, the Japanese fire blight measures collectively and individually have no basis in science.

14. In addition to not having sufficient scientific evidence to maintain its fire blight measures, Japan’s fire blight measures are not “based on” a risk assessment within the meaning of Article 5.1 and Annex A and therefore are inconsistent with Article 5.1 of the SPS Agreement. As the Appellate Body noted in Australia–Salmon, to be consistent with Article 5.1, a risk assessment must: “(1) identify the diseases whose entry, establishment or spread a Member wants to prevent within its territory, as well as the potential biological and economic consequences associated with the entry, establishment or spread of these diseases; (2) evaluate the likelihood of entry,
establishment or spread of these diseases, as well as the associated potential biological and economic consequences; and (3) evaluate the likelihood of entry, establishment or spread of these diseases according to the SPS measures which might be applied.\(^1\)

15. While the United States recognizes that Japan’s assessment of risks has fulfilled the first requirement under Article 5.1 – that is, it has identified fire blight as the disease whose entry, establishment, or spread Japan wants to prevent within its territory as well as potential associated biological and economic consequences – Japan has not fulfilled either of the two remaining requirements.

16. With respect to the second requirement, while Japan purports to follow international guidelines for plant pest risk analyses, Japan fails to focus on the scientific evidence relating to the importation of apple fruit, making only general statements of possibility rather than an assessment of the likelihood, or probability, of entry, establishment, or spread. The 1999 Japanese Pest Risk Analysis, on its face, does not present any scientific evidence or analysis of the probability of entry of fire blight bacteria through apple fruit. In addition, Japan’s analysis of the “Possibility of [Fire Blight] Transmission by Apple Fruit,” concludes: “Therefore, the possibility of fire blight transmission by fresh apple fruit cannot be denied.” However, the United States notes the Appellate Body’s statement that, “for a risk assessment to fall within the meaning of Article 5.1 and the first definition in paragraph 4 of Annex A, it is not sufficient that [it] conclude that there is a possibility of entry, establishment, or spread of diseases.”\(^2\) Thus, Japan’s statement that a “possibility” of transmission “cannot be denied” without any assessment of the probability of entry renders its pest risk analysis deficient under Article 5.1 of the SPS Agreement.

17. That the Japanese Pest Risk Analysis does not evaluate the likelihood or probability of entry is evident in its fundamental failure to identify and discuss those scientific studies that are relevant to the apples sought to be imported. A proper focus on studies relevant to mature, symptomless fruit would have allowed Japan to begin to assess the probability of imported U.S. apples being infected or infested with fire blight bacteria. Instead, Japan presents the results of studies on, \textit{inter alia}, immature fruit, visibly infected or damaged fruit, artificially wounded and inoculated fruit in storage, visibly infected fruit left on trees, apple leaves, and pear fruit. Indeed, Japan explicitly dismisses certain evidence on the basis that it relates “only” to “symptomless” or “healthy looking” fruit that is “mature.” There is no scientific basis to diminish this evidence by asserting that it “only” relates to mature, symptomless fruit when \textit{this is the very fruit} that the United States seeks to export to Japan and for which Japan must assess risk.

\(^1\) Australia – Measures Affecting the Importation of Salmon, WT/DS18/AB/R (adopted November 6, 1998), para. 121 (italics in original) (“Australia – Salmon (AB)”).

\(^2\) Australia-Salmon (AB), para. 123 (first set of italics added).
18. Japan’s Pest Risk Analysis also did not evaluate the likelihood of entry because it failed to describe fully the steps that must be completed for entry of the bacteria. The International Plant Protection Convention Standard on Pest Risk Analysis for Quarantine Pests lays out steps that comprise an evaluation of the probability of entry quite plainly: (1) identification of relevant pathways; (2) the probability of the pest being associated with the pathway at origin; (3) the probability of survival of the pest during transport or storage; (4) the probability of the pest surviving existing pest management procedures; and (5) the probability of transfer of the pest to a suitable host. In the specific case of fire blight, to evaluate the likelihood of entry, Japan must analyze not only the likelihood that *Erwinia amylovora* may be isolated on or in mature, symptomless apple fruit (step 2), but also the likelihood that the bacteria would survive any normal commercial fruit handling (such as removal of trash, sorting, rinsing, grading, and packing) (steps 2 & 4), would survive any cold storage prior to, during, or after importation (step 3), would survive any exposure to the environment both before and after consumption (steps 2 & 5), and would be transferred from any imported apple tissue to the appropriate site on a host for fire blight at a time when the host is susceptible to infection (step 5).

19. Simply put, Japan has not provided any evaluation of the likelihood that these multiple steps necessary for entry of the fire blight bacteria would be completed; rather, it merely asserts that discarded fruit left in the natural environment, “can be” a source of fire blight transmission. The Japanese statement is mere speculation as no scientific evidence is cited in support.

20. Similarly, Japan presents no evaluation of the likelihood or probability of establishment and spread of fire blight. The International Plant Protection Convention Standard on Pest Risk Analysis for Quarantine Pests lays out factors to consider in evaluating the probabilities of both establishment and spread. With respect to the probability of establishment, factors include the availability, quantity, and distribution of hosts in the pest risk analysis area, the environmental suitability of the pest risk analysis area, the reproductive strategy of the pest, its potential for adaptation, the method of pest survival, and cultural practices and control measures in the pest risk analysis area. With respect to the probability of spread, factors include the suitability of the natural environment for natural spread of the pest, the presence of natural barriers, the potential for movement with commodities or conveyances, the intended use of the commodity, potential vectors of the pest in the pest risk analysis area, and potential natural enemies of the pest in the pest risk analysis area.

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21. Japan presents evidence relating to some of these factors, but its conclusory statements of possibilities again fall short of an evaluation of probabilities, particularly as Japan does not consider important contrary evidence. Japan does not identify the probable means by which the fire blight bacteria would enter and therefore the likely place of establishment (that is, the city, country, growing regions, or elsewhere). Japan apparently dismisses the possibility that the disease could be eradicated before spread, despite contrary evidence from Australia and Norway. Japan also does not evaluate whether the disease, once established, could be prevented from spreading, despite admitting the existence of evidence that Europe has successfully done so. The failure to evaluate this evidence is all the more striking given that the European and Mediterranean Plant Protection Organization recommends European nations at high risk for fire blight introduction to restrict the importation of host plants for planting but not the importation of fruit of fire blight hosts.

22. In sum, rather than “evaluate the likelihood” of entry, establishment, or spread, the 1999 Japanese Pest Risk Analysis does little more than conjecture about the possibility. As the Appellate Body in *Australia–Salmon* concluded, the second requirement for a risk assessment under Article 5.1 will not be met when the assessment makes “general and vague statements of mere possibility of adverse effects occurring; statements which constitute neither a quantitative nor a qualitative assessment of probability.”\(^6\)

23. With respect to the third requirement of a risk assessment within the meaning of Article 5.1 and Annex A, Japan must evaluate the likelihood of entry, establishment or spread of fire blight disease according to the SPS measures which might be applied.\(^7\) As the Appellate Body noted in *Australia–Salmon*, a risk assessment that “identifies such measures but does not, in any substantial way, evaluate or assess their relative effectiveness in reducing the overall disease risk” does not “fulfil the third requirement” for a risk assessment, “i.e., it 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.”\(^8\) The Japanese analysis of certain SPS measures which might be applied does not rise above the threshold of *some* evaluation of likelihood or probability.

24. Japan clearly identifies some SPS measures which might be applied to U.S. apples in that it names those measures it already applies. However, the Japanese Pest Risk Analysis does not evaluate the “relative” effectiveness of *any* of these measures in reducing the overall disease risk.

25. The Japanese Pest Risk Analysis also fails to consider the SPS measures which *might* be applied, rather than those measures which it already applies. The United States has informed

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\(^6\) *Australia–Salmon* (AB), paras. 129 (citing Panel Report, para. 124), 131.

\(^7\) *Australia–Salmon* (AB), para. 121.

\(^8\) *Australia–Salmon* (AB), paras. 133-34 (quoting Panel Report, para. 8.90).
Japan that measures on mature, symptomless apples are not necessary because these fruit do not serve as a pathway for the disease; the United States had even proposed compromise alternative measures to Japan. Japan, however, failed to consider these alternative measures, 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 at all. Thus, 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.

26. 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.” As indicated by the International Plant Protection Convention Standard on Pest Risk Analysis for Quarantine Pests, the probability of entry of a pest is linked to the probability of the pest being associated 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. 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.

27. 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. Such an unreasoned recitation of evidence cannot “reasonably support” the SPS measures Japan has imposed. In addition, the Japanese Pest Risk Analysis 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) or any evidence of the existence of a vector or the probability of bacterial transfer to a suitable host (step 5 of the Convention’s guidelines for evaluating the probability of entry). Thus, the resulting analysis of the risk posed by imported apples does not “sufficiently warrant” or “reasonably support” the Japanese fire blight measures.

28. Finally, in Australia – Salmon, the Appellate Body confirmed the relationship between Articles 5.1 and 2.2, stating 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.” 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.

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10 Australia – Salmon (AB), para. 138.
C. Japan’s Assessment of Risks Is Inconsistent with Article 5.2 of the SPS Agreement

29. The Japanese Pest Risk Analysis is 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.”

30. The Japanese Pest Risk Analysis presents some information relating to fire blight, but Japan has failed to take into account certain key pieces of information as required by Article 5.2. First, Japan has failed to take into account available scientific evidence that mature, symptomless apple fruit do not serve to transmit the fire blight disease. Second, Japan has failed to take into account relevant ecological and environmental conditions in the U.S. States of Washington and Oregon. 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 (that is, not a single mature, symptomless Washington apple fruit has ever tested positive for internal or external fire blight bacteria, even when harvested from infected trees). Third, Japan did not take into account quarantine or other treatment. While Japan recognizes in the 1999 Pest Risk Analysis that the chlorine treatment it currently requires is adequate “to sterilize fire blight bacteria that may have attached to the surface of fresh apple fruits,” Japan does not consider the scientific evidence that chlorine treatment by itself mitigates any possibility that bacteria could be found externally on mature, symptomless apple fruit. Thus, by failing to take into account available scientific evidence, relevant ecological and environmental conditions, and 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

31. Japan has acted inconsistently with Article 5.6 of the SPS Agreement because the Japanese fire blight measures are more trade-restrictive than required to achieve Japan’s appropriate level of phytosanitary protection. As the panel and Appellate Body found in Australia – Salmon, there are 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.”11 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.

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11 Australia – Salmon (AB), para. 194; see also Australia – Salmon (Panel), WT/DS18/R, para. 8.167.
32. Restricting the importation of apples to mature, symptomless apple fruit is a reasonably available measure that is already in use. U.S. law and regulations currently 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. 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 any production restrictions or post-harvest treatments.

33. Restricting importation to mature, symptomless apple fruit also achieves Japan’s appropriate level of protection. There is no evidence that mature, symptomless apple fruit serve to transmit the bacterium. To the contrary, the scientific evidence establishes that apple fruit have never transmitted fire blight and are not a pathway for the disease. Billions of apple fruit have been shipped worldwide without a single instance of fire blight transmission via those fruit. Thus, a mature, symptomless apple fruit measure would (in Japan’s words) allow Japan to prevent introduction of fire blight and maintain its fire blight-free status.

34. Restricting importation of U.S. apples to mature, symptomless fruit would be significantly less restrictive to trade than the current Japanese fire blight measures. One comprehensive scientific study estimates that one percent of apples are harvested from orchards that satisfy the Japanese fire blight measures; under the U.S. proposed alternative measure, by definition, all mature, symptomless apple fruit would qualify for export to Japan.

35. Finally, the fact that Japan’s fire blight measures are more trade-restrictive than necessary is also evident from the range of other possible measures that are less trade-restrictive and would more than achieve Japan’s appropriate level of protection. Three examples of such alternatives include requiring that imported mature, symptomless fruit be harvested in Washington or Oregon, requiring that imported mature, symptomless fruit be harvested at least 10 meters from a source of inoculum, and requiring that mature, symptomless fruit be treated with chlorine. 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.

E. Japan Has Acted Inconsistently with Article 7 and Annex B of the SPS Agreement

36. 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. 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. Specifically, since 1995 Japan appears to have amended or introduced MAFF Notification No. 354, which sets the requirements for imports of U.S. apples, and MAFF “Detailed Rules for U.S. Apples,” which implements Notification No. 354, without notifying WTO Members. By failing to notify changes to its fire blight measures through the March 10, 1997 MAFF Notification No. 354 and 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.

IV. CONCLUSION

37. The United States respectfully requests that the Panel find that Japan has acted inconsistently with its obligations under Articles 2.2, 5.1, 5.2, 5.6, and 7 and Annex B of 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.