We agree that the induced infestation research was limited in scope and did not prove Hass avocado to be a non-host for *Anastrepha* fruit flies. However, we do not agree that the infestation that did occur during the testing proves Hass avocados to be preferred hosts. Under artificial laboratory conditions, females of some *Anastrepha* species, including *A. ludens*, will oviposit in almost any fruit available, or even in wax spheres (Norrbom, Allen L., and Ke Chung Kim,

"A List of the Reported Host Plants of the Species of Anastrepha (Diptera: Tephritidae)," APHIS, 1988). Moreover, other evidence indicates that Hass avocados are non-preferred hosts while on the tree. In the cage studies conducted in the field by Sanidad Vegetal, which we feel were conducted properly, Hass avocados on the tree were shown to be non-preferred hosts to Anastrepha. Also, APHIS records from interceptions of avocados smuggled into the United States from Mexico indicate that the Hass avocado is a non-preferred host to Anastrepha. In fact, according to APHIS and Agricultural Research Service records, Anastrepha fruit flies have never been found in Hass avocados outside of laboratory tests. We are confident that the phytosanitary measures we are proposing would prevent infested Hass avocado fruit from being exported from Michoacan into the United States.

Several of the comments claim that the fruit fly trapping conducted in 1993 by Sanidad Vegetal was inadequate to accurately determine fruit fly populations in production areas in Michoacan and subsequently develop effective pest mitigation measures based on the population data. These comments maintain that:

• Traps were not moved frequently enough or maintained correctly;

• Trapping was conducted for too short a duration;

• Trapping density was too low, especially considering that the McPhail trap was used;

• Some trapping was conducted while trees were being sprayed with methyl parathion, thus distorting trapping results, as populations in sprayed areas would be unnaturally low; and

• No trapping was conducted with regard to wild or alternative commercial hosts.

We agree that the trapping conducted by Sanidad Vegetal in 1993 was flawed in its execution; many traps were neither moved often enough nor maintained properly. Initial quality control problems occur in most trapping programs. If we allow the importation of Hass avocados from Michoacan, we will require trapping year-round. We would hold such trapping to a higher quality standard and monitor its execution. Also, we believe that the trapping conducted by Sanidad Vegetal, although it was conducted imperfectly and for a short duration, does provide valuable preliminary data regarding the population of *Anastrepha* fruit flies in avocado production areas in Michoacan.

The density of the 1993 trapping—one McPhail trap per 10 hectares—is standard for population monitoring and was approved by APHIS prior to the trapping. Trapping at this rate is currently required by APHIS in Sonora, Mexico, to maintain the fruit-fly free zone in that State. We are proposing that Sanidad Vegetal trap at the rate of 1 trap per 10 hectares throughout the year and that this trapping be monitored by APHIS.

Some trapping was conducted while trees were being treated with pesticides. However, since this sort of pesticide treatment is routine in Michoacan, and since similar pesticide treatment would occur in orchards growing avocados for export to the United States, we believe that trapping conducted during or after pesticide treatment provided accurate population data.

We agree that Sanidad Vegetal did not conduct trapping with regard to wild or alternative commercial hosts. However, our interest in the 1993 Sanidad Vegetal study is to determine populations in the production areas, not in areas where wild or alternative hosts were being grown.

Because of our reservations concerning Sanidad Vegetal's 1993 fruit fly trapping, we have proposed to allow the Hass avocados from Michoacan to be imported only between November and February, when temperatures in Michoacan significantly lower the level of fruit fly activity.

Several comments expressed concerns that Sanidad Vegetal studies of the pests Heilipus lauri, Stenoma catenifer, Conotrachelus perseae, C. aguacatae, and Copturus aguacatae did not attempt to identify their seasonal abundance or geographical distribution in Michoacan. Furthermore, the comments claim that Sanidad Vegetal surveys for these pests in Hass avocado production areas in Michoacan were too limited to produce meaningful results, were not supervised by APHIS, and were not conducted carefully, that is, the surveys were not conducted in accord with scientific standards or in the context of pest biology. Finally, the comments maintain that the data reflect significant finds of these pests in production areas.

We believe that the design of the 1993 pest surveys was appropriate for

detecting infestation and that Sanidad Vegetal took pest biology into account while conducting the surveys. Data from these surveys is of varying quality, but we believe inconsistencies are indicative of authentic pest survey data. While we did not supervise the surveys, we did observe several as they were being conducted.

It is important to remember that the phytosanitary requirements we propose to place on the avocado imports from Michoacan are not based solely upon the pest surveys and other studies conducted by Sanidad Vegetal in 1993. Much of their findings were of a limited quality and only supplement the data we have used in developing this proposal. If this proposal is finalized, we will monitor closely the pest surveys we are proposing to require for determining municipality and orchard freedom from the avocado pests.

Several comments raised concerns that the Sanidad Vegetal studies did not address risks presented by *Anastrepha distincta, A. leptozona, or A. obliqua,* or several other possible pests of avocados known to inhabit Mexico. Avocado is not a host to these other pests (Norrbom, Allen L., and Ke Chung Kim, "A List of the Reported Host Plants of the Species of *Anastrepha* [Diptera: Tephritidae]," APHIS, 1988).

Other comments argue that APHIS should not allow Hass avocado imports from Michoacan until Sanidad Vegetal can establish Michoacan as a pest-free zone.

As explained above, APHIS uses systems approaches to phytosanitary security to allow fruits and vegetables to be imported safely into the United States from countries that are not free of certain plant pests. APHIS has successfully used systems approaches to establish conditions for the importation of several commodities, including Unshu oranges from Japan, tomatoes from Spain, and peppers from Israel. APHIS also uses systems approaches to establish conditions whereby domestic fruits and vegetables may be exported from areas in the United States that are not free of certain plant pests, such as citrus fruit from Florida and Texas, apples from Washington, and stonefruit from California. We now are proposing to use a systems approach to allow Hass avocado fruit to be imported into the northeastern United States from Michoacan, Mexico, an area where fruit flies and certain avocado pests are known to exist. We believe this systems approach would prevent the introduction of plant pests into the United States from Michoacan and that therefore, it is unnecessary to establish