

**IMPORTATION OF *ROSMARINUS OFFICINALIS* L.
(ROSEMARY)
AS FRESH LEAVES AND STEMS
FROM EL SALVADOR AND GUATEMALA
INTO THE CONTINENTAL UNITED STATES**

A Qualitative, Pathway-Initiated Risk Assessment

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A. Introduction

This risk assessment (RA) was prepared for the Animal and Plant Health Inspection Service, (APHIS), U. S. Department of Agriculture (USDA) under Purchase Order Number 43-6395-0-2185 (dated June 27, 2000). The project was supported by the U. S. Agency for International Development under Project Hurricane Mitch Economic Initiative.

The purpose of this RA assessment is to examine pest risks associated with the importation into the United States of fresh leaves and stems of *Rosmarinus officinalis* (rosemary) from El Salvador and Guatemala.

The RA is a qualitative one in which risk is expressed in terms such as high and low rather than in numerical terms such as probabilities or frequencies. The details of the methodology and rating criteria can be found in: *Pathway-Initiated Pest Risk Assessments: Guidelines for Qualitative Assessments, Version 5.0* (USDA, 2000a).

Regional and international plant protection organizations, e.g. North American Plant Protection Organization (NAPPO) and the International Plant Protection Convention (IPPC) administered by the Food and Agriculture Organization (FAO) of the United Nations provide guidance for conducting RAs. The methods used to initiate, conduct, and report this RA are consistent with guidelines provided by NAPPO and FAO. Our use of biological and phytosanitary terms conforms to the *Definitions and Abbreviations* (Introduction Section) in *International Standards for Phytosanitary Measures, Section 1-Import Regulations: Guidelines for Pest Risk Analysis* (FAO, 1996).

TheThe FAO guidelines describe three stages of pest risk analysis: Stage 1 (initiation), Stage 2 (risk assessment), and Stage 3 (risk management). This document satisfies the requirements of FAO Stages 1 and 2.

B. Risk Assessment (RA)

1. Initiating Event: Proposed Action

This RA is commodity based and therefore is pathway-initiated. It was conducted in response to a request for the USDA to authorize the importation of a particular commodity presenting a potential plant pest risk. The importation into the United States of fresh leaves and stems of *Rosmarinus officinalis* (rosemary) as a commodity from El Salvador and Guatemala is a potential pathway for the introduction of plant pests. The regulatory authority for the importation of fruits and vegetables from foreign sources into the United States may be found in the Code of Federal Regulations (7CFR§319.56).

2. Assessment of Weediness Potential for *Rosmarinus officinalis*

The results of weediness screening for *Rosmarinus officinalis* (rosemary) from El Salvador and Guatemala (Table 1) did not prompt a pest-initiated risk assessment.

Table 1. Process for Determining Weediness Potential of the Commodity	
Commodity:	Fresh leaves and stems of <i>Rosmarinus officinalis</i> L. (Lamiaceae) for consumption.
Phase 1:	The species is widely grown in the United States in gardens and commercially.
Phase 2:	Is the species listed in: <ul style="list-style-type: none"> <u>NO</u> <i>A Geographical Atlas of World Weeds</i> (Holm, et al., 1979). <u>NO</u> <i>World's Worst Weeds</i> (Holm, et al., 1977). <u>NO</u> <i>Report of the Technical Committee to Evaluate Noxious Weeds; Exotic Weeds for Federal Noxious Weed Act</i> (Gunn and Ritchie, 1982). <u>NO</u> <i>Economically Important Foreign Weeds</i> (Reed, 1977). <u>NO</u> <i>Composite List of Weeds</i> (Weed Science Society of America, 1989). <u>NO</u> <i>World Weeds</i> (Holm, et al., 1997). <u>NO</u> Is there any literature reference indicating weediness (e.g., <i>AGRICOLA</i>, <i>CAB</i>, <i>Biological Abstracts</i>, and <i>AGRIS</i> search on "species name" combined with "weed."
Phase 3:	Conclusion: The species is widely grown in the United States and has not been reported to have weedy characteristics. The weediness potential is negligible.

3. Previous Risk Assessments and Decision History for *Rosmarinus officinalis* from El Salvador and Guatemala

Previous history (APHIS, 2000):

Guatemala: 1988, Permit entry; Inspection and treatment if warranted by pest findings.

Plant Protection and Quarantine interception records at ports-of-entry:

El Salvador and Guatemala: None.

4. Pest Categorization

Pests reported in the scientific or regulatory literature on *Rosmarinus officinalis* from El Salvador and Guatemala are recorded in Table 2. Table 2 also presents information about geographic distribution, host associations and regulatory data. Table 2 represents a comprehensive list of these organisms and serves as a basis for selecting pests for more detailed biological analysis.

Table 2. Pests Associated with <i>Rosmarinus officinalis</i> L. in El Salvador and Guatemala					
Pest Name (Order: Family)	Geographic Distribution ¹	Plant Part Affected ²	Quarantine Pest ³	Likely to Follow Pathway ³	References
ARTHROPODS					
<i>Philephedra tuberculosa</i> Nakahara & Gill (Homoptera: Coccidae)	GU, US (TX and FL)	L, S	N	Y	CABI, 2001; Scalenet, 2001
<i>Saissetia oleae</i> (Olivier) (Homoptera: Coccidae)	ES, GU, US	L, S	N	Y	CABI, 2001; Hill, 1994; IIE, 1952

¹ ES = El Salvador, GU = Guatemala, US = United States

² L = Leaves S = Stems

³ Y = Yes, N = No

Any pest that is listed as "N" in the "Quarantine Pest" column is not considered to be a quarantine pest. Any pest listed as a "Y" is considered a quarantine pest if found on imports of leaves and stems of *Rosmarinus officinalis* from El Salvador or Guatemala. Should such a pest be found on commercial or any other shipments of rosemary, quarantine action will be taken. Pests that are listed as "Y" in the "Likely to Follow the Pathway" column and a "Y" in the "Quarantine Pest" column are candidates for further analysis in Tables 3, 4, and 5.

The scale insects, *Saissetia oleae* and *Philephedra tuberculosa*, listed in Table 2 does not meet these standards for further analysis. This risk assessment stops at this point.

C. Literature Cited

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