EXHIBIT 6 : 12

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Plant Genetics and Germplasm Institute

FOREIGN TRAVEL REPORT

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and
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Mexico
July 16 - August 26, 1974

Purpose of Trip: To procure 10,000 pounds of dried plants of Bouvardia ternifolia, source of a potent new tumor inhibitor. This is the estimated amount of plant material needed by the National Cancer Institute to provide enough of the active agent for preclinical and clinical evaluation.

Summary: During the period of travel in Mexico, 12,646 kilograms of fresh plants of Bouvardia ternifolia were collected in the mountains of the Sierra Madre Oriental east of Saltillo, Coahuila. This quantity of fresh plants yielded 4,950 kilograms (10,890 pounds) of dried and milled material, which more than adequately met procurement objectives. The processed plants were packed and shipped by truck to the Parke Davis Company in Detroit, Michigan, where the active agent will be extracted for use by the National Cancer Institute.

Detail:

A Mexican plant, Bouvardia ternifolia, is the source of a potent new tumor inhibitor. The active agent is an uncharacterized compound of high molecular weight (600-700) which has shown significant activity against B-16 Melanoma, an animal test system designed to select agents that will be effective against the slow-growing, drug resistant cancers in man. In addition, the compound is highly active against L-1210 Leukemia in experimental animals. Because of this exceptional activity, the compound has been selected as a candidate for clinical evaluation by the National Cancer Institute (NCI).

This spring, the Medicinal Plant Resources Laboratory (MPRL) was informed that NCI urgently needed an estimated 10,000 pounds of dried plants of Bouvardia ternifolia to provide enough of the active compound to proceed with the clinical phase of the investigation.

Upon receiving this information, MPRL began the initial planning for the procurement. It was tentatively decided in late May that MPRL personnel would join forces with Mr. Edmund H. Sallee, a highly reliable botanical contractor in Mexico. The previous year, Mr. Sallee had been successful in supplying MPRL with 2,000 pounds of dried Bouvardia plants collected from

wild populations in the Saltillo area. Based upon his experience and information, Saltillo was tentatively selected as a base of operations. The modus operandi was to involve a division of labor between the contractor, Mr. Sallee, and the MPRL personnel, Dr. Barclay and Mr. Spjut. Because of his experience and contacts with many Mexicans in the Saltillo area, Mr. Sallee would be primarily responsible for collecting, while the MPRL personnel would be responsible for the drying, milling, packing, and shipment of the plant material. According to the terms of the contract, MPRL would purchase up to 16,000 kilograms of whole fresh plants of B. ternifolia from Mr. Sallee. It was estimated that this quantity of fresh material would yield the 10,000 pounds of dried plants needed by NCI. The fresh plant material would be delivered to Dr. Barclay or Mr. Spjut, the Government representatives, in Saltillo, Mexico, or such other point as may be determined later by mutual agreement of both parties.

In June, Dr. Barclay made a preliminary trip into Mexico to lay the groundwork for the actual procurement operation scheduled for July and August. It was necessary, before the operation could begin, to obtain permits from the responsible Mexican governmental agencies in Mexico City. These are required in order to legally collect the plants, to temporarily import the equipment to be used in the drying, milling, and packing, and to export the plant material into the United States. After consulting with American and Mexican officials in Mexico City regarding the issuance of permits, Dr. Barclay made a field reconnaissance of the Saltillo area in company with Mr. Sallee. This was undertaken to determine if the planned operation should indeed by conducted in the Saltillo area, rather than elsewhere in Mexico. In addition, consideration had to be given to the most efficient means of collecting and handling this mass of plant material.

During the course of the reconnaissance, enough populations of B. ternifolia were found in the mountains east of Saltillo to adequately supply program needs. The plants were found to be especially abundant as weeds in areas of cultivation or disturbed sites, such as apple orchards, corn fields, and roadsides. Clearly, the major part of the collecting could be accomplished by exploiting these weedy populations, and furthermore, the harvesting of this Bouvardia would not produce an undesirable environmental impact on the area. Besides providing information on the distribution and abundance of B. ternifolia in the Saltillo area, the reconnaissance provided firsthand information on the availability of labor there, and the existance of facilities for storage and preparation of the plant material.

Armed with the information gained through field reconnaissance, we were ready to proceed with the procurement operation as soon as the necessary permits were issued by the Mexican Government.

The permits that were finally issued allowed us to collect and export 5,000 kilograms or 11,000 pounds of dried Bouvardia plants, and this is the amount we endeavored to procure during the actual operation.

The operational plans, developed before and during the reconnaissance trip, closely reflect the nature of the Bouvardia project as it unfolded in the Saltillo area.

The collecting phase of the operation took place in the mountains of the Sierra Madre Oriental ca. 20 miles east of Saltillo. The majority of the Bouvardia plants were collected in the higher regions of two large valleys separated by part of a mountain range.

Our botanical contractor, Mr. Sallee, and his Mexican associate, Sr. Jose Antonio Farias, managed the Bouvardia collecting. The "ejidos" or communal farms in the valleys supplied the labor force involved in the collecting. Approximately 90 families participated in the collecting. The ejidos were usually notified 24 hours in advance as to when the purchase of their Bouvardia samples would take place. At the designated time, each family would wait with their collections, at home or along the road, for the arrival of Mr. Sallee and Sr. Farias, who would weigh and purchase their plants. Mr. Sallee would then transport the collections to a predesignated delivery point. From there, they were transferred to the drying and processing area by Dr. Barclay and Mr. Spjut.

Transportation to and from the field was provided by a Chevrolet van from the GSA Motor Pool in Houston, Texas. The vehicle also served to import temporarily the compost mill, tarps, rolls of plastic, burlap bags, and other equipment used in the drying, processing, and packing of the plant material.

Two large, well-ventilated poultry houses were rented to provide a covered drying area and space for the preparation and storage of the plant material. Three local Mexicans were hired to assist in the drying, milling, and packing operations.

Throughout the course of the operation, the fresh and dry weights of the Bouvardia collections were carefully monitored to avoid wasteful over-collecting. We had originally estimated it might take as much as 16,000 kilograms of fresh plants to produce the 10,000 pounds of dried material needed by NCI. Shortly after we started, it became obvious we had grossly overestimated the amount of fresh Bouvardia plants needed to yield the desired quantity of dry material. This was true, even though we had increased our procurement objective from the original 10,000 pounds to the 11,000 pounds allowed under our collection and export permits. Our final figures show that 12,648 kilograms of fresh plants yielded 10,890 pounds of dried and milled material.

Mr. Clarke W. Allard, the Administrative Officer at the American Consulate in Monterrey, was very helpful in expediting the surface transport of the Bouvardia collection from Mexico to the Parke Davis Company in Detroit, Michigan.

Additionally, we were very fortunate to have Mr. Sallee working with us. His years of field experience in Mexico have made him exceptionally competent; but, equally important, he proved to be a truly dedicated and

conscientious individual. He cooperated with us fully and frequently went out of his way to be helpful. Mr. Sallee deserves credit for a major share of our success.