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SECRETARY OF NATURAL RESOURCES AND ENVIRONMENT

Honduran Technical Ozone Unit

**NATIONAL PROJECT FOR ELIMINATION OF METHYL BROMIDE
SECOND FASE**

Project No. MP/HON/06/001

**FINAL REPORT OF
APRIL 2008**

Contracto ONUDI/SERNA No. 16001375

Tegucigalpa, Honduras

**FINAL REPORT of the "I PROJECT OF ELIMINATION METHYL BROMIDE.
SECOND PHASE – HONDURAS C.A"**

INTRODUCTION

In the enthusiasm to achieve the fulfillment of the commitments acquired with Montreal's protocol so much this Technical Unit of the Ozone like the productive companies of melon we have been immersed in conducive activities to the substitution of the use of the Methyl Bromide for another existent alternative in the national and international market.

All utilized activities have been known and proven in different cultivations including the melon, attaining a relative success in what it has been known believing that we go walking on a good path in everything that is coming true.

Companies the melon dealers are, each their, making a bet on different combinations of technologies in the confrontation of the problem but everything believe in what they are doing and they do it with a lot of effort and absolute dedication to the works that the used technologies demand .

The productive companies of melon are working on the development of their planned activities and the majority have planned them counting on the gear that has been requested in the execution of the present project and than he has managed to come out onto the passage of the haste presented by them thanks to the efforts accomplished by ONUDI head office.

This office has accomplished all that is concerned to offer the support to the companies to come through with the activities contained and planned in the project and equally fulfilling the commitments acquired like country and once now the productive companies of melon being solidary with us like national authority were transfered responsible of the theme for delegation.

All the above takes us to the finalization of the first year of activities and the consequent report of the activities accomplished by this office, in fulfillment to what's agreed between this office and ONUDI.

ACTIVITIES

Concerning to the process of elimination of the Methyl Bromide in Honduras have been classified of the following form in the development of the activities:

to.- Inter-Institutional Coordination

Just as it was planned several activities that are managed in the execution of the project must be coordinated with Agricultural and Cattle Secretary office, specifically (DICTA) those who are with Science Management and Technology the persons in charge to drive the experiment stations of the country and in this I match The Lujosa that is the experiment station located in Choluteca, the region where you find the centers of production of melon of the country the majority of.

Two meetings with the National Director have kept on of the DICTATE, the Eng. Arturo Galo who delegated in the Eng. Rigoberto Nolasco that we have maintained some four meetings with, National Investigation Director but for the sake of specifying activities to develop and team's elaboration of list of laboratory once the project was requested and, principally, for the deal for part of them, of the technical person in charge and responsible of the farm activities to come true at the experiment station The Lujosa where the planned activities will have to take effect. This last activity has been her but difficult to realize considering that they have not gotten candidates that fulfill the demanded requirements that has delayed the execution of the action bringing as a result the slowness of the works planned for the experiment station.

We have received the eraser of agreement that we were having remitted in previous days for his revision and where the terms for the execution of the funds, this agreement come into question one would sign enter DICTA, SERNA and ONUDI. Everything this has been delayed by a series of emergency activities in the production of basic foodstuff that we are living at our country.

In them besides activities always a technician assigned to give tracking to what melon dealer of the country is accomplishing herself at the field of the producers at the region has existed, in front of our invitation,.

Pertaining to the handling of the Methyl Bromide imports to Honduras, we have permanently coordinated with National Service of Crop and Cattle Protection (SENASA) with those who we controlled the handling of the assigned quotas each melon producer company and the fact that we made sure of his fulfillment with the support of Entrance Executive Management (DEI) they depend of the country's customs and quotas of the Fumigant for Honduras offer us his effective support for the execution of the system.

b. - Custom Steps

With acquisition, for part of the project, of the team and materials for the melon producer company, we have been implicated, no in the direct steps of the customs clearance, than music accomplished by the companies' part but yes largely in the steps of The Custom, necessary dispensations in order that materials or team may deposit the free country of taxes or another fees just as the commitment comes from country in front of the United Nations.

It has been had to do the necessary contacts within the responsible institutions like the Secretary of State and the bursar, equally you see that with Entrance Executive Management by way of could have sped up the step that authorization of dispensation that you have to each request make join the shipment's documentation gets to our hands.

SURAGROH in a total of four containers having no finalized still the process of total importing of the trays of the two containers and containing the line's equipment has been worked up in the dispensations for the trays for greenhouses brought from Costa Rica for the company in the specific cases of sow envoy from Italy which we met in with the problem than in a minute to arrive at the place the opponent and having right now obtained you absolve her correspondent from with the documentation's copies shipment, these could not be custom clearance because the original documentation, what I cause that the first container be stored for over 30Days, causing daily costs for storage than the paid company at the end of the process.

The antagonistic microorganisms processed the necessary dispensations for team's importing for the laboratory of production themselves for the company Agrolibano and which to this date Mr. Rodrigo Serpa has not gotten to the country, according to information of our contact in the ONUDI in Vienna,, it is due to the problems found by the supplier for some specific teams' manufacture.

The correspondent steps for the dispensation of the team of laboratory acquired for the Lujosa experimental center have been accomplished, DICTA, than you have not gotten even to the country just like Agrolibano team of laboratory.

Also has kept on the contacts with executives of the Spanish company INKOA that they were the ones that provided Mesh to the project of the house, that the company request EXCOSUR and the fact that you deliver it coordinate him through a company From Guatemala who would do in the Savior sent off from that country road to ours and they would install the mesh at the company matches it.

All the necessary negotiations came true stops than house's container originating mesh of Guatemala is able to on time entering since the dispensation would initially have been granted to enter for Courteous Puerto's customs and you would enter really for give it the Amatillo, which is why they requested again the documentation road the UNDP.

We kept on having problems to the effect that the necessary documents to do the step of custom dispensation do not arrive on time to the grade that the product touches to the customs and documents do not find anywhere. The ideal would be that to make the purchase they send us the documentation to initiate steps of dispensation of such way than when the material or team, arrive right now let's have a hold over the respective dispensation and skipping payment of storage.

C. - Meetings With the Companies Melon Producers.

Another one of our indispensable activities to develop in the execution of her tasks is the constant communication and the meetings with the executives and technicians of the company's necessary melon dealers for the planning of activities and execution to exactly of the governess planned. These have been developed in the order following:

C. 1. Agrolibano

She is the Company with those who longer with Agrolibano we have maintained meetings and farm visitors. They have been around a weekly visitor from than himself I initiate the season 2007-2008 from the month of August of the year 2007.

We have accompanied collaborator for the development of the planned activities to the company in the handling of the activities of the project because we have come across staff so much technical, administrative like executive, extremely.

C.2. Excotur.

We have joined together some five times which you are within with this Company give it the planning for the installation of the house mesh, electing the area, with facility of access, irrigation, electricity, drainage among other things. Another one to see aspects related with the project like the revision of the team of laboratory requested for this new stage of the project where they concede the need to enlarge their options to the cultivation, in addition to chemistry also the biological.

Also I join of to you important points you did not sole with this company you are to examine the road contingent upon the challenges than and have for market or costs to follow for the substitution of the Methyl Bromide in his systems of production.

This company, may to be the minor of everything, she is the one that feigns to manage the aspects of the production of way to control important aspects like the irrigation like an important factor in the handling of production.

C. 3. Suragroh.

This company from the beginnings of the works of the project has confronted the problem of substitution of Methyl Bromide, only with the theme of the grafts, being give it the three companies' bigger production manages but 50 % of the production of melon and almost indiscreet and foolish person's 100 % of the production for exportation this ends it is produced in totality with plants of indiscreet and foolish persons engrafted in employer of pumpkin, without Methyl Bromide.

We have joined together you vary occasions with the technical staff of the different companies in the different centers of production, so much at Ojo de Agua. We would also be able to mention than this company, during the present year, this producing melon and indiscreet and foolish person at the nearby country of Guatemala for exportation principally to Norte America's United States.

In spite of the fact that the company executives plead that the melon graft in pumpkin does not yield the quality enough to the they utilize fruit to guarantee the production in some of the lots that not even the use of Methyl Bromide guarantees them itself.

D. - Aspects of the Project.

The works of planting of cultivation have continued the second cycle themselves that is at the southern and Oriental zone of the country as it is known to them. The melon dealers that are SURAGROH, EXCOSUR and AGROLIBANO have as far as lies within my power gone in the three projects incrementing the areas of cultivation that of way not very significant they have increased the quantity of fruit for exportation and although many of the processes to which they are subdued in the elimination of Methyl Bromide recently are being evaluated and revised by each of the companies.

D.1.- Agrolibano.

The agricultural Agrolibano join of the three companies that have invested and once the component of investigation was unrolled and production of Biological products and organic matter to substitute Methyl Bromide in I grow it of melon, as also it is of the knowledge to international level on the recent themes of problems of innocuousness that supposedly they be found in fruit exported toward United States and than caused losses worth millions to the company and to the country, also somehow to affected the community close to the farmsteads from where the greater part of the staff is taken than in them you work, it told to us that they have accomplished an untold number of proofs and analysis andan anomaly or problem that the decrease of the quality of the product suggest have not been detected.

This theme is of a lot of importance for us because this company in addition to be at work with us in the project is second in importance at the country, as to production and exports and it is the one and only that takes care of some European markets. We have also followed up on the corresponding thing in biological agents' production and organic fertilizer for those lots of production of melon without Methyl Bromide. Right now than the given support this stage to the company has been in expert advice in theme of production and quality of biological as well as the provisioning of the laboratory of investigation and production, which right now I inform according to himself keep on working with a bigger request to capability, which is why we do what's possible in making agile teams in order that these be available at the company to the possible brevity.

The request came from 1000 kilos over per day for this moment and the laboratory to his principal rhythm of production with the existent team what

somehow was converted in problems for those bosses of farmstead that could not fulfill his program established for production did not produce over 600 kilos per day.

Commented on the side of the company's manager some of the problems caused by the retrace of the teams of laboratory to us of whom already for this date they could not back up the company because the season recently this finishing ; It told to us that the request of the company in biological material was a lot of principal it was having the capacity to the laboratory cause for what they argument that some of the problems of attacks to the cultivation that they suffered at some lots are owed to the incapacity to be able to cover up his request of biological.

Also he argued over the company expectations for the future goals in cultivation, and to the ground, also I explain to them his program of substitution of Methyl Bromide to him on the side of Mr. Serpa than the retrace in the shipment of the team of the bought laboratory a company in Austria is due to the scarcity of steel for a team's manufacture in I specify as you are it her autoclave requested.

Mentioning is room for that this company for this season has had export problems of melon for United States, to have been linked according to the FDA to cases of intoxication for salmonella in people at that country. What has done that the total output of melon be commercialized of regional way and national, being left nothing else with the European market but this does not represent over 20 % of the total of production this has represented it you did not sole losses to the company but to the country per se since this item of the melon are the third product of importance in the agricultural exportation of the country, you have also caused problems with the staff that has tended that to be fired by the fall in the international request of this fruit.

The company continues to be firm in spite of these problems and in attachment to the objectives with the project with the plan of elimination been convenient of Methyl Bromide in this cultivation, having made right now out of advances some of his needs for this next season, which would be in capacitating and plus team of laboratory among other things.

We visited the company's laboratory where the investigations, reproduction and distribution of the biological material for cultivation come true periodically I specify of melon, where we met with the technical persons in charge, those who they keep us informed by means of audiovisual conferences and punctual visitors to the modules of production that the company until now has achieved of the laboratory on the advances, commitments and specific results in biological material in addition to present weaknesses or limitations that the laboratory has

in the production to cover up the request of the different farmsteads of the company in the production of melon.

We could verify with Mr. Serpa, the reception and status of some teams and supplies profit besides a journey in all the stages of investigation, production and storage and biological agents' distribution, like Trichoderma, Bacillus subtilis, between other ones in addition to the different results obtained with some presentations of the product like the liquid Trichoderma accomplished the project.

D.2.- Excosur

Excocur is an one belonging to the companies of minor size in extension of area but you always have areas of planting without the utilization of Methyl Bromide substituted by antagonistic mushrooms like Trichoderma and some products that they offer fortress to the plant in order that they may resist of better form the attacks of the pathogenic mushrooms that better be adapted to the conditions of the ground, nematodes and bacteria, besides you have been working on development or proof of varieties of melon, climate, diseases eat also those varieties that contribute the quality demanded by the consumers of this fruit. .

The irrigation of the plantations, the fact that you become one of the more important factors in the handling of the cultivation of the melon at this company, you have taken a value and unusual importance because the form departs important in the handling integrated of cultivation.

The Eng. Edgardo Torres who the production manager comes from the company, you gave us to know the goals that one has in the theme of substitution of Methyl Bromide in the cultivation of melon, equally some doubts on one of the optional teams of the house filtered mesh that is about to receive itself on the side of the project themselves and than according to documentation received of the agency, as the trucks of irrigation are it, they were not included in the purchase according to the supplier that they are and necessary for the kind of project of research and development of technical news in the cultivation of melon in Environment controlled under shade.

The company on the goals in the substitution of Methyl Bromide in cultivation has also informed us and he is than now in addition to the house mesh and just like another one of the companies this looking for biological agents' development that they lean the programs of cultivations without the utilization of Methyl Bromide, which is why one is considering than they will be asking for complementary equipment for laboratory since at this moment they count with a little laboratory that the company has started for the sake of enlarging the area

of investigation as part of the support for this new season be more than enough biological even could have produced to cover his own Demand .

Also it considered himself, according to plans with another companies, to be able to coordinate staff trainings in charge of the area of investigation that you have experience enough in the theme and laboratory in some of the countries of the region as Cuba, Colombia, Venezuela, Brazil are it.

With Mr. Serpa visitor, the visitors at the different lots of cultivation and for the area selected for the installation of the house sold off mesh, which was in process of conditioning, leveling, system of irrigation among other things, also himself I check the documentation relating to themes pending like the cancellation of the journey to Almería that you accomplish of the company in the theme of low cultivation shade personally. In this case some differences on the material described in the purchase order and what was received at the company on the side of the supplier so that the company in sending of official way committed itself met and in writing the detail in order that ONUDI procures her do the appropriate consultations.

D.3.- Suragroh

A company is Suragroh that at present the indiscreet and foolish person for exportation grows and that completely you do it utilizing engrafted plants, for that in the start of this second phase of the project of elimination of Methyl Bromide has backed her up to him about in a 100 % the requests in teams and supplies.

In order to achieve to reduce the attack of mushrooms and pathogenic bacteria in the start-up period of the melon at the greenhouse, they have installed air heaters that entrust of shortening the relative humidity of the midway themselves. They right now have plantations at field in his initial stage in the one that does not observe a classroom of damage itself.

At the sector of Ojo de Agua, El Paraiso Department where we visited in several occasions in this season farmstead's facilities the group's SOL SurAgroh and where only indiscreet Grafting for the order of the 700 hectares in some cases and is cultivated they grow themselves in two cycles seasonally.

We accomplished a journey also for the I modulate of pallet's sterilization than according to law Nift 15 of treatments of quarantine and pre-shipment are treated with Methyl Bromide, although he be of the knowledge the fact that there are alternatives like heat and another chemicals has companies that even use the B.M. to this end.

We knew on the achievements and problems in the program of grafts that the company obtained for this season as well as the tendencies of market development, varieties of cultivation between other ones. We could observe the line of harvest, washing, classification and packing of the fruit, following international standards that the excellent quality and hygiene's of the same guarantee .

Also we maintain the canal of contact with the office of the manager of the company SurAgroh in Choluteca Mr. Arnon Farud, who among other things explain us in detail on the present-day problem confronted by the productive companies of Honduran melon with the exports toward the United States, where the sanitary authorities of that country have established rigorous hygienic measures for these companies that export melon toward this country.

In addition also one argued and I give to him Mr. Serpa the ONUDI official information about problems and obstacles found with the customs clearances of the different , embark of teams and supplies that be him given the agency to the company by the project that you go in for a disco ordination and, suppliers and the UNDP in Tegucigalpa the original documentation of embark them was not arriving on time for customs clearances the goods without causing fines or economic sanctions for part of the bonded warehouses that companies had to pay in their moment.

We have monitored the installations of the greenhouses of the project and where a great part of the plants that the company utilizes in the cultivation of melon at the zone, the Eng. Leonel Molina is the person in charge of the production of plants, and grafts are produced I explain to us than you find the operations of production of plants in visitor's these moments finished by this season, but that they are initiating with some essays of plants melon engrafted in employers of varieties of melon, to substitute the pumpkin of whom they insist that this alters the taste of the fruit for that for issues of market Or consumer preferences do not like the taste of this type of fruit engrafted in pumpkin.

We could verify with Mr. Serpa, some of the teams that have been sent for the project by luck and supplies company, these are trays of 128 and 200 holes as well as washing machines of trays under pressure the one that is being operated already in the greenhouses, as tell it that he finds the line of planting once such was stored and as they arrived taken apart why one is hoping that GERMA of Italy be coordinated with the company, who the supplier went from the aforementioned equipment, who you would have the responsibility of the installation and operators' cap citation and the team's total starting.

Also we visited some of the lots of to company Suragroh, where they have sown field with plants you engraft of melon in pumpkin we could verify the vigor of the plants and fruits as well as his performances for apple, only desirable characteristics for a cultivation that turns her into a very promissory practice.

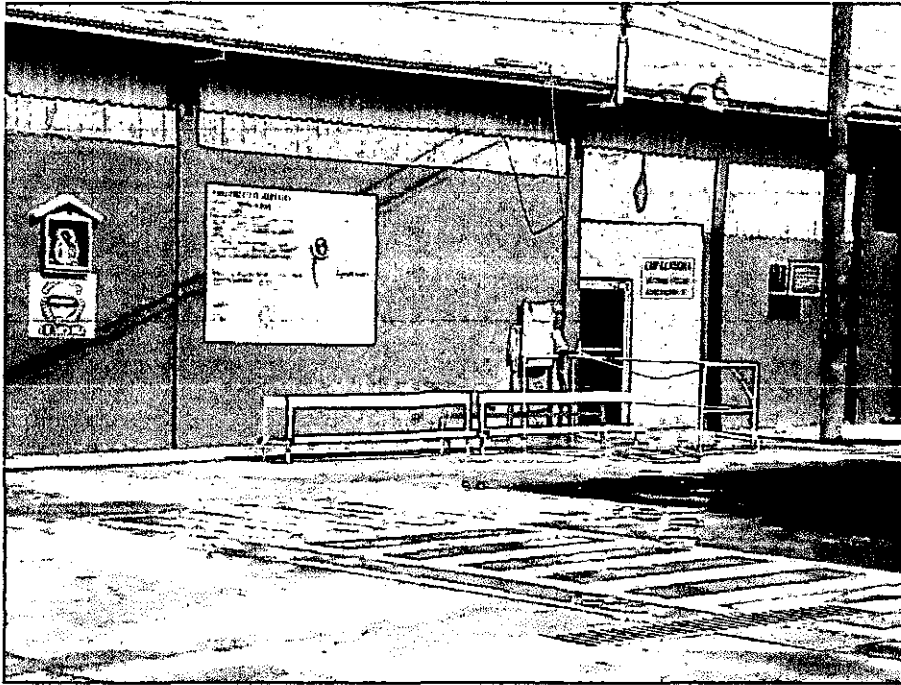
CONCLUSION.

- 1.- The project has developed according to the initial expectations with a good inter-institutional coordination in addition to the support of the authorities of Environments Secretary which itself it is fundamental to assure the objectives proposed so much national like international.
2. - The good and expeditious handling of ONUDI.' level project has been evident
3. - The companies show up engaged with the planned works to develop at his plantations like also in sticking to the commitments contracted in the adoption of the plan of elimination of the Methyl Bromide in his cultivations.
4. - They have hit very good result existent the levels of communication between the companies, the authorities in Honduras and the project in Vienna.
- 5.- We can conclude this first Elimination stage of the implementation of National project of Methyl Bromide at the sector Melon Producer, like successful inside of the corresponding to the fulfillment of the agreements subtracted with the companies where the quotas assigned for each one their have been obeyed; In some cases underneath maximum allowed quantity.

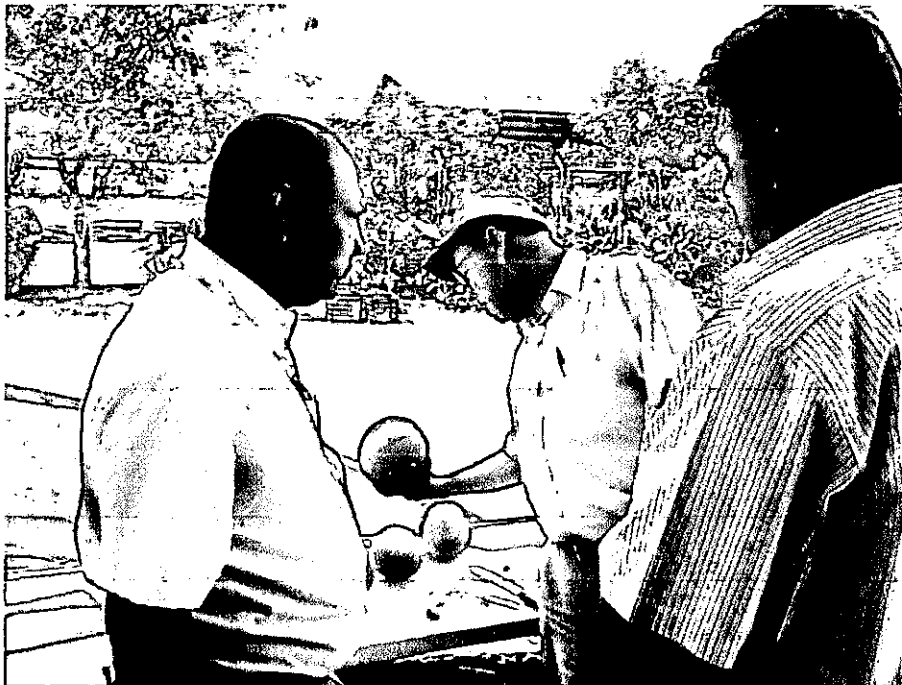
RECOMMENDATIONS.

- 1.- Companies-Honduran Project must strengthen communication channels himself principally in this stage of planning of the second year to watch over that what's planned agree to the objectives of the project. Coordination Vienna will have to be all the same or better as to the handling of the information of the different acquisitions with the suppliers, this project and the UNDP in Tegucigalpa those who at the end I join to the responsible to accomplish the steps of dispensations on time and to avoid setbacks or delays in the customs clearances of the products for the companies are the project melon producer.
2. - you must keep on and to become stronger the communication channel ONUDI UTOH Melon Companies, in that order.

ATTACHMENTS I



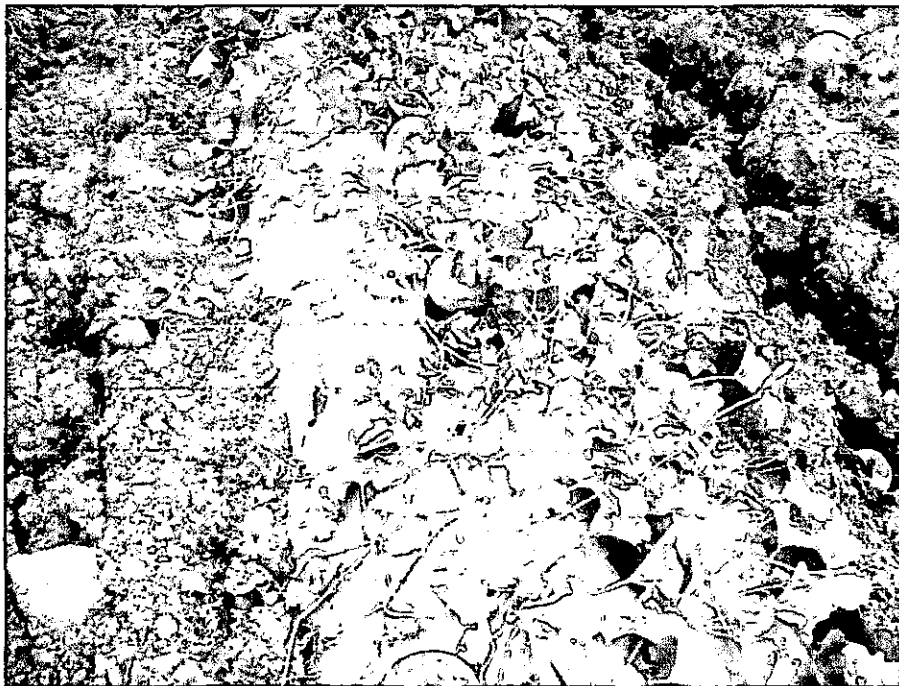
Dress of the principal packer of melon of the company Agrolibano, at Coyolito sector at farmstead St. Rosa.



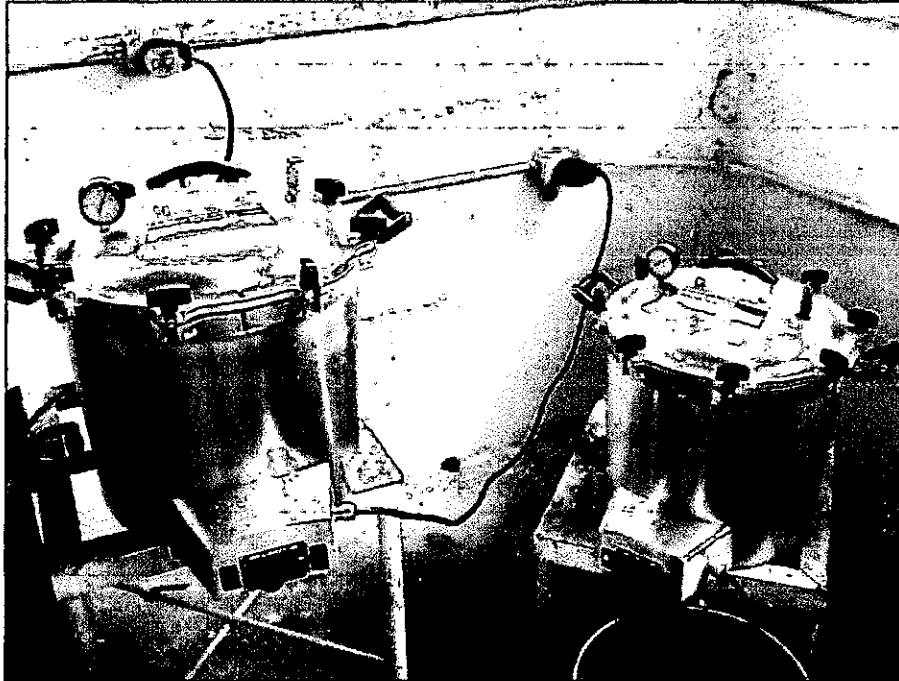
Accomplished visitor the packer Montelibano with Mr. Miguel Molina President of the company, En Eng. Edilberto Baday Production manager and the Eng. Enrique Arias National Coordinator of the Project.



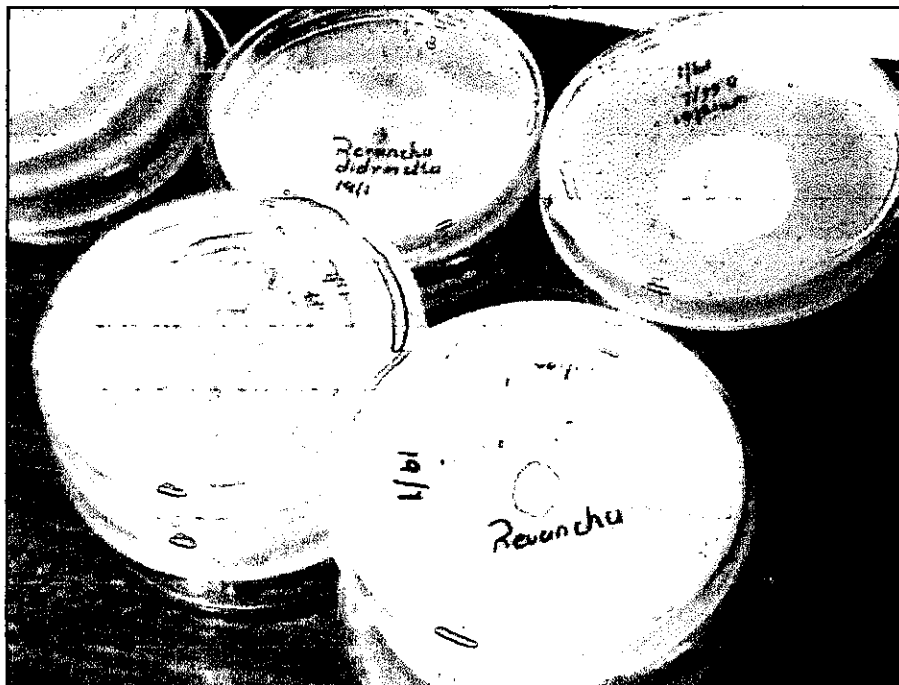
Journey for some lots of the to Montelibano Farm, at Choluteca sector, where some of problems of attack of bacteria showed up for cultivation.



Plants of melon affected for make their Agrilobano ill, of the company.



The company departs from the equipments of laboratory provided by the project Agrilobano, consisting of five autoclaves to back up the production of biological material stops present it season.



Depart of matter of investigation of biological than come true at the company laboratory Agrolibano, in substitution of Methyl Bromide letter n. Cultivation of melon.



Meeting with Agrolibano staff, UTOH and Mr. Serpa of ONUDI.



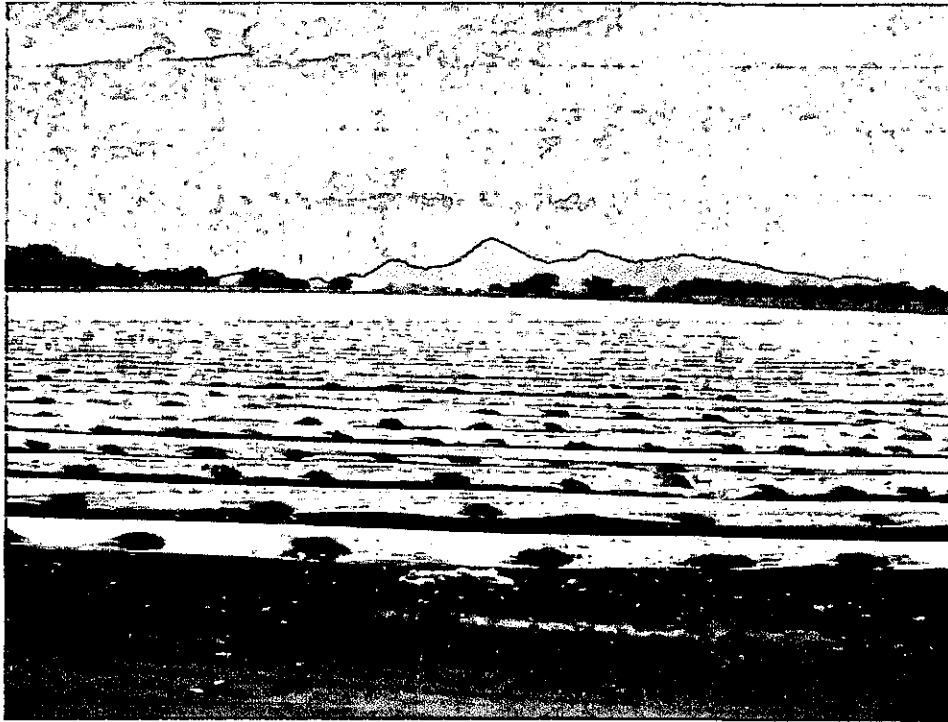
Journey in production area of beneficial insects for the melon crop, at the laboratory of to the Agrolibano Company, Choluteca.



***Meeting with representatives of the companies melon producers,
accomplished at the company offices EXCOSUR.***



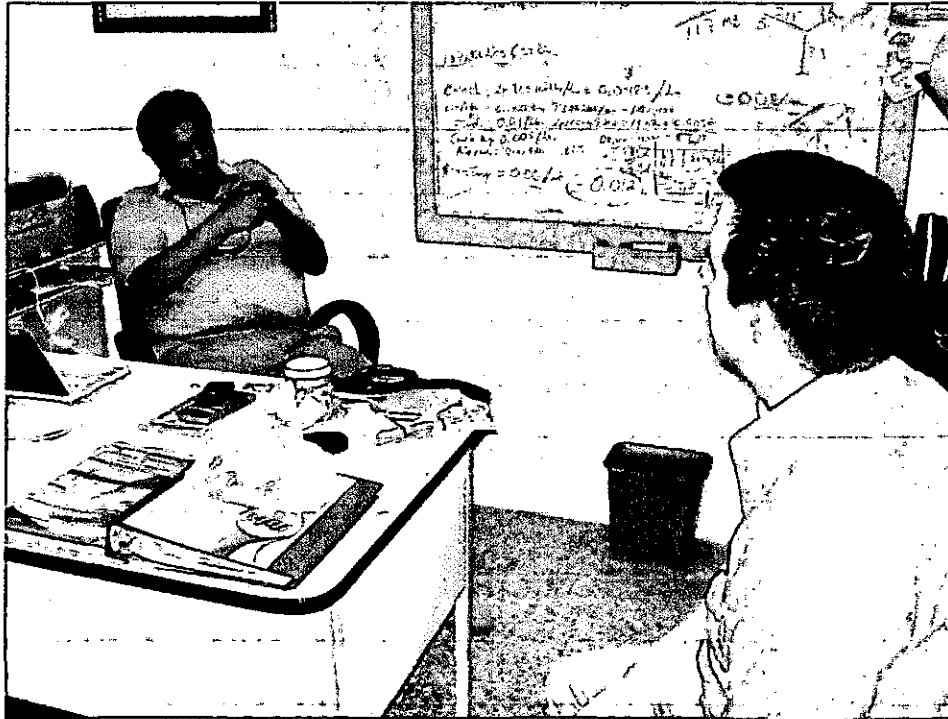
***Eng. Enrique Misselem, Manager of the company EXCOSUR. In the meeting
supported in this company .***



Company lots EXCUSUR recently sown with melon plants, second cycle of the season 2007-2008.



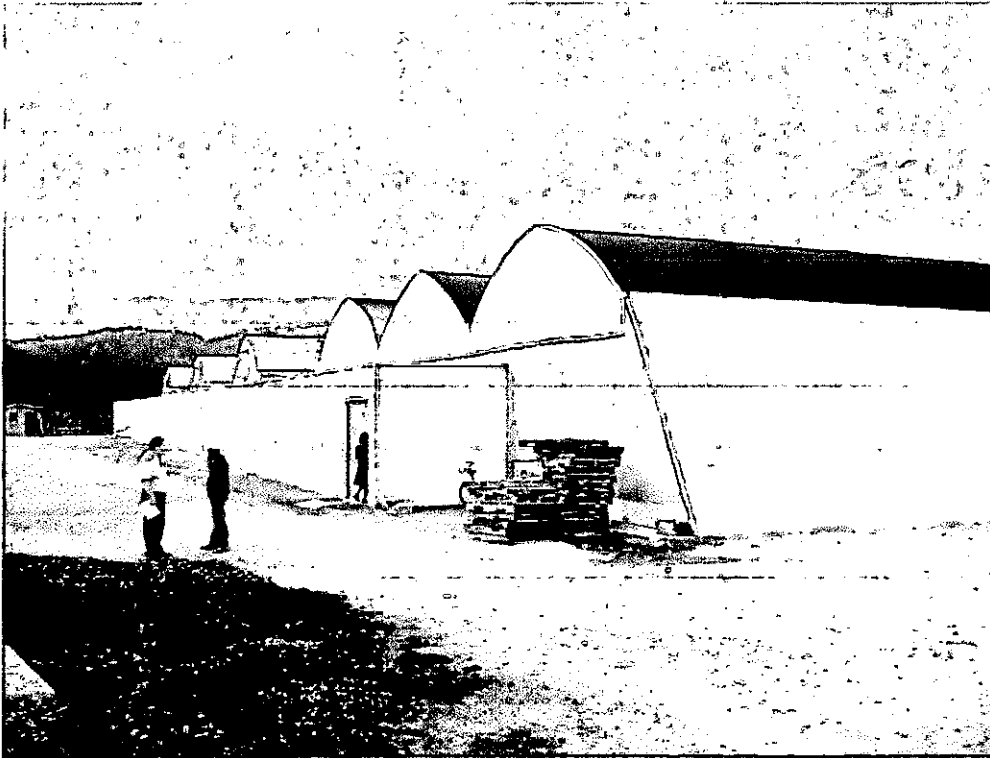
Him lots company EXCOSUR, ready for the harvest of melon in the second cycle of to the season 2007-2008.



Meeting supported with the company's production manager EXCOSUR, the Eng. Edgardo Torres, in Mr. Rodrigo Serpa recent visitor of ONUDI, with yield in Vienna, Austria.



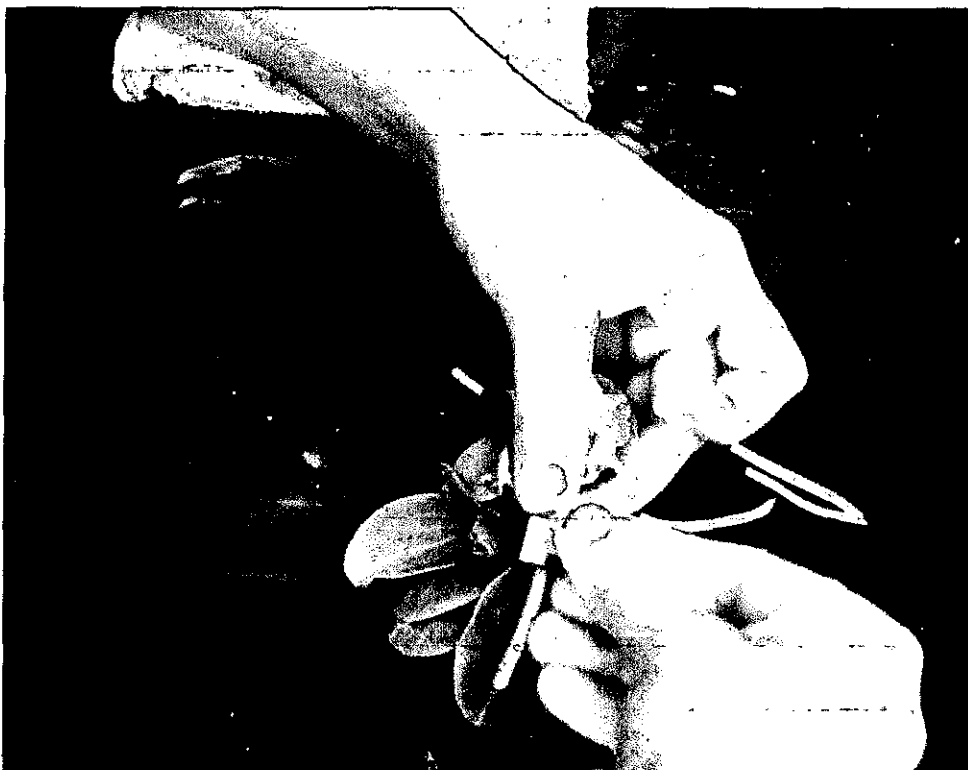
Preparations of the area for the installation of the house mesh at the company EXCOSUR, Marcovia sector, Choluteca.



Modules of the greenhouses of production that SURAGROH give him to the project the company and that are installed at the farmstead of plants and grafts Sol at the sector of water eye, Paraiso.



Company lots SURAGROH, sown fields of plants of Water melon graft in pumpkin, like a one belonging to the alternatives to the elimination of Methyl Bromide in this cultivation.



I engraft of Watermelon plants in employer of pumpkin, at the farmstead Sun, Ojo de Agua, SURGROH.



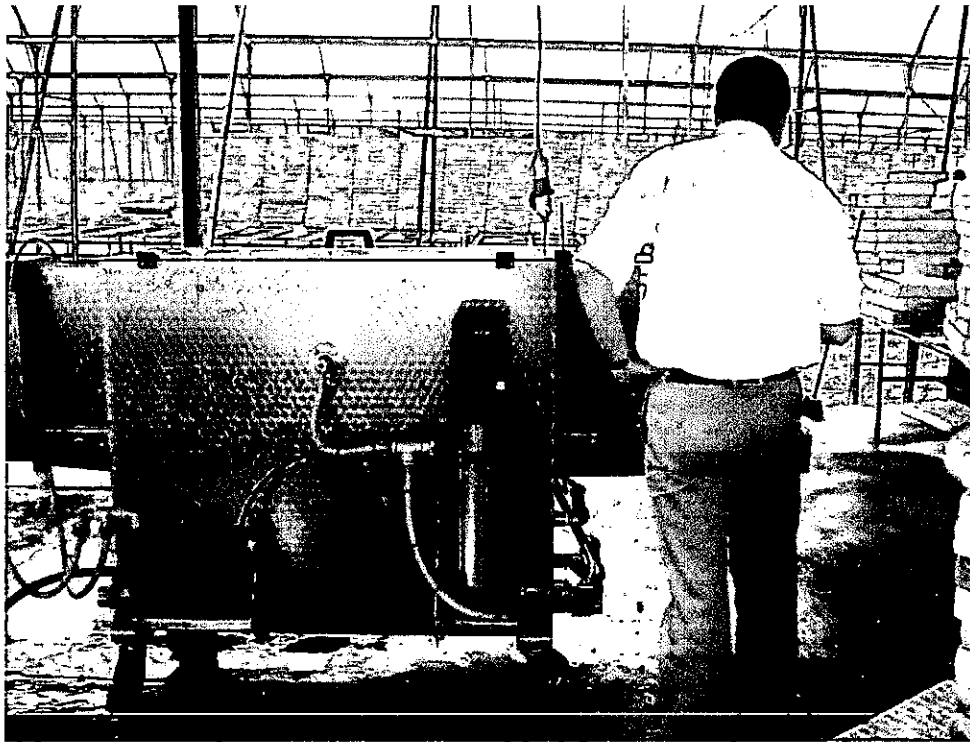
I modulate of development of grafts, at the greenhouses installed at the farmstead SUN, SURAGROH, Ojo de Agua.



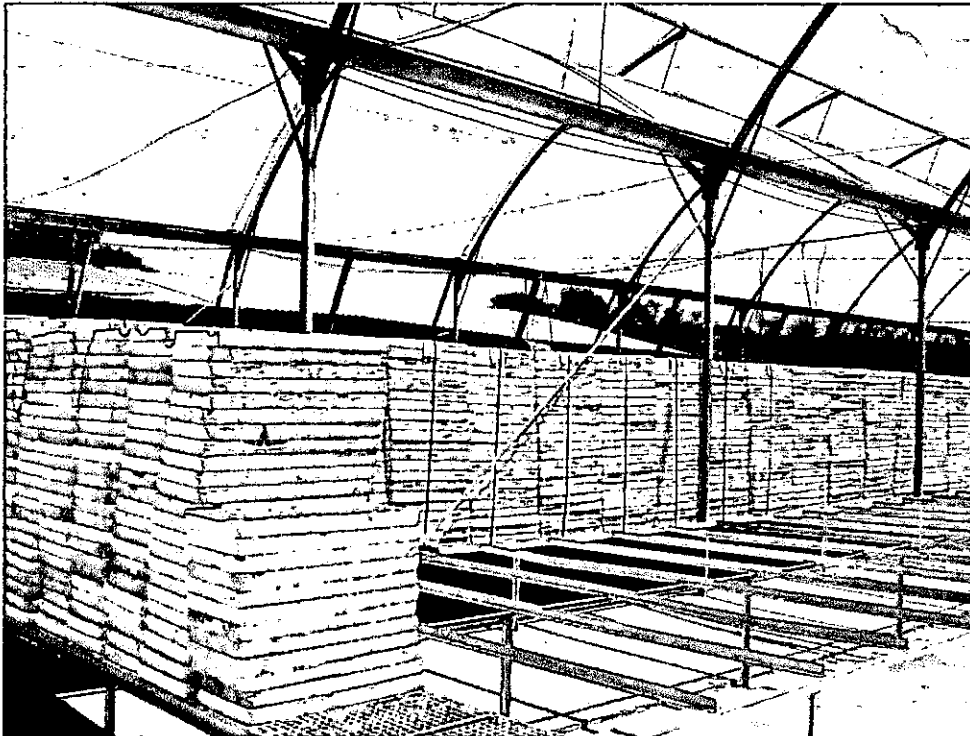
So big a personal, company indiscreet and foolish person line of packing SURAGROH, farmstead SUN, Ojo de Agua.



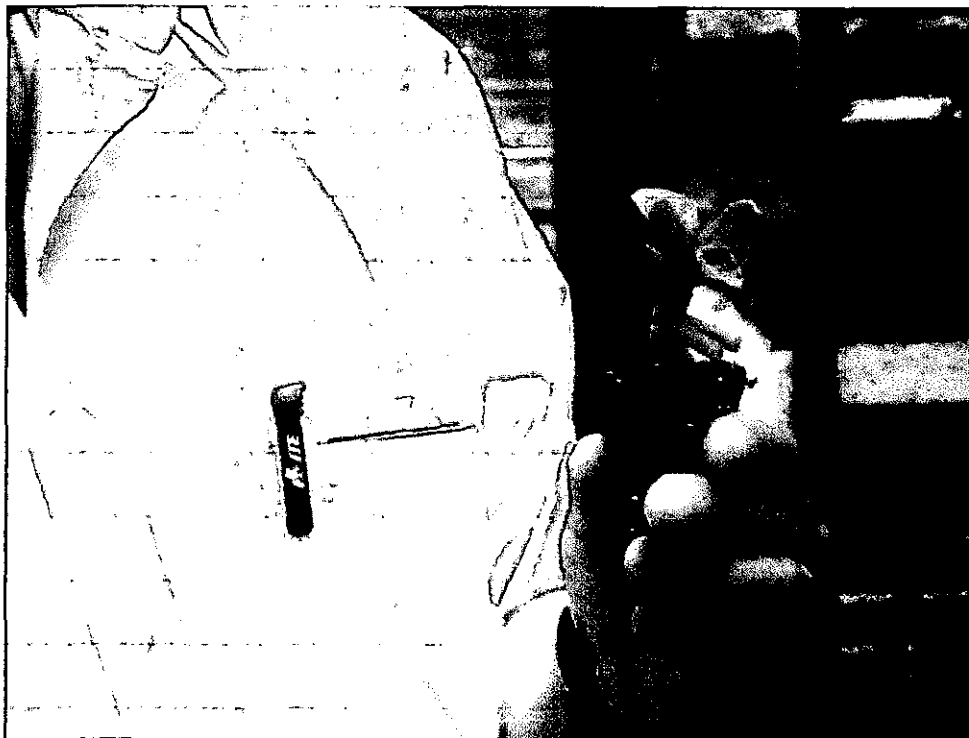
Area of treatment with Methyl Bromide of the pallets utilized on exportation of indiscreet and foolish person and melon SURAGROH.



Machinate to wash rooted trays, provided for the project to the company SURAGROH, and installed in the modulate of the greenhouses at Choluteca sector.



SURAGROH, for the production of plants and grafts in cultivation of melon and indiscreet and foolish person departs from the lot of rooted trays provided to the company by the project.



. Melon graft on melon, part of the program of improvement and investigation of employers than the company SURAGROH, realize at the greenhouses of Choluteca sector.



Split of the Clips for grafts provided by the project to the company SURAGROH.



You visit the field grown I engraft in pumpkin, at the company's some lots SURAGRO, at Marcovia sector, of melon Choluteca.



Melon I engraft in pumpkin, of the company SURAGROH, Choluteca, season 2007-2008.