7-10-2003

Region's Coffee Threatened By Berry Borer

LADB Staff

Follow this and additional works at: https://digitalrepository.unm.edu/noticen

Recommended Citation

This Article is brought to you for free and open access by the Latin America Digital Beat (LADB) at UNM Digital Repository. It has been accepted for inclusion in NotiCen by an authorized administrator of UNM Digital Repository. For more information, please contact amywinter@unm.edu.
Region's Coffee Threatened By Berry Borer

by LADB Staff

Category/Department: Central America

Published: 2003-07-10

A parasite in Central America is threatening to make a bad situation intolerable for the region. Coffee producers were first hit by record-low prices (see NotiCen, 2002-08-01). Then there was a sharp decline in production accompanied by abandonment of farms and coffee plantations. Now the borer has come.

In El Salvador the pest has been identified in 16 municipios and 27 coffee-producing cantons. The Fundacion Salvadorena para Investigaciones de Cafe (Procafe) has announced that about 11,900 hectares are infested. Because of the abandonment of so many properties, Procafe estimates that 52,410 ha could fall to the plague. The spread will be facilitated by the abandoned trees because they still have beans on the branches left from last year's harvest. It is in these beans that the insect remains, ready to attack new fruits.

Broca, as the insect is called in Central America, came originally from Africa. Also known as the coffee-berry borer, or hypothenemus hempei, it is about 1.25 mm in length and feeds exclusively on the coffee bean. It penetrates the bean, where the male fertilizes the female. As is so often the case in these matters, the male then dies within the bean and the female leaves after depositing her eggs in the bean, seeking other fruits to continue the cycle. She deposits two or three eggs in each borehole, and can leave as many as 30 in a single bean, or as many as 70 in several beans. The eggs mature as new flowers appear, within about 90 days. The hatchlings are then ready to repeat the cycle.

Procafe general manager Carlos Lainez said that the broca first arrived in El Salvador in 1981. He said the outbreak is worse this year "because on the fincas there has been abandonment and a lack of pepena [scavenging for beans that have fallen to the ground.] Also, there has been no repela [harvesting the junk beans left on the trees in times of normal harvests, when the value of the beans justifies the effort.]" Morazan is the department in El Salvador most affected; the bug has spread to about 15.9% of the crop there. The plague lowers the value of properties, reduces crops, lowers their quality, and makes them difficult to sell.

Lainez estimated the overall infestation at about 5%, and expects the figure to double within 30 to 45 days. "Now there are potential threats which, if not taken into account and the necessary action taken, could affect the rest of the country," he said. "Now the losses are only potential, but if the infestation rises to 8% or 10%, the losses could be 50,000 quintals [42.5 kilos] or about US$3 million."

About 161,000 ha in El Salvador are under coffee cultivation. The hardest-hit municipalities in the western part of the country are Salcoaitlan in Sonsonate and San Pedro Puxtla in Ahuachapan. In the central region, they are Santa Tecla, Antiguo Cuscatlan, and Zaragoza in La Libertad; Santo Tomas, San Marcos, Apapa, and Nejapa in San Salvador; and Cojutepeque in Cuscatlan. In the east, most affected are Berlin Tecapan and Jucuapa in Usulatan and Chinameca and Ciudad Barrios in San Miguel.
Procafe has begun an emergency program to combat the pest. They have held informational meetings to alert producers and to let them know how to cut the affected fruit, show them what it looks like, and discuss issues like shade. It has been observed that the newer, sun-grown coffee varieties are more susceptible because the absence of shade trees diminishes bird habitat, and birds eat broca. On fincas with more than 5% infestation, they recommend chemical control, a measure that carries risks of its own.

"Chemical control is more reliable, because it is effective in 80% of the cases, but it must be done in a responsible manner because inexpert application carries serious consequences," said Lainez. Protection for workers from the chemicals requires specialized hats, boots, coats, trousers, eyewear, and breathing apparatus. These precautions have historically been ignored, giving rise to tragedy. Another defense is the release of parasitoids, a natural enemy of broca. It is not as effective as poison, but safer. Procafe has already released about 130 million of the creatures.

There are two species of parasitoids, both wasps. Traps using a chemical attractant are also used. Whatever the method used, Procafe’s main message to producers is that they must decide quickly to attack the problem. In the western and central zones, they have no more than five weeks; in the east, no more than four. "The good news," Lainez said, "is that we are at the optimal moment for chemical control, because it is now that the insects are in the phase of introduction to the plants." Lainez put the cost of control on lands already infected at about US$238,000.

**Not a good time**

The bad news is that this is a bad economic time for a complication like this to be hitting El Salvador. The commercial debt rose to US$1.7 billion between January and May, an increase of 16.6% from the same period in 2002, according to the Banco Central de Reserva (BCR). Exports for the period stood at US$1.3 billion and imports at US$2.4 billion. Traditional exports accounted for US$98.9 million, of which US$67 million were from coffee, US$27.6 million from sugar, and US$4.3 million from shrimp.

Elsewhere on the isthmus Broca has also been observed with alarm in Costa Rica and Panama. Costa Rica has issued a national alert after the recent appearance of the pest in Boruca, in the south of the country. Officials have not yet termed the outbreak an emergency, but they have set up checkpoints and fumigation posts in El Ceibo. In Paso Real, they are stopping the transport of coffee to the production areas of Perez Zeledon and Coto Brus, which are still free of the insect. In La Yarda, in Palmar Sur, coffee transport is being blocked to the Inter-American Highway.

Luis Alfredo Montes Pico, director of disaster control for the Ministry of Agriculture and Livestock, said that the checkpoints would be charged with stopping coffee from entering broca-free zones from the affected areas.

Coffee from the affected areas will be rerouted to processing plants within those zones. More checkpoints and restrictions are planned. Authorities have been watching the progress of broca since December 2000, and have maintained a phytosanitary cordon around the Valle Central in hopes of keeping it from reaching the south, the major coffee-growing area.
Those hopes were sundered when, on June 25, Panama issued a public alert over the situation in Boruca, Costa Rica. Panama was thought to be the only country in the world free of the insect. Costa Rican authorities have already trained 1,500 producers in methods for avoiding propagation of broca, accepting that it cannot be eradicated. The UN's Food and Agriculture Organization (FAO) has given US$198,000 for the development of a training plan. So far, 7,000 hectares, or 10% of the country's total coffee plantation, has been affected. Officials say they are satisfied with their management to date, finding 10% infestation since December 2000 acceptable.

Further south, in Panama, authorities are more concerned and less prepared. The appearance of broca in the coffee zones of the province of Chiriqui seems imminent. It is now only 50 km from the Rio Sereno border, having made its way over the Cerro de la Muerte, once considered a natural barrier. Rio Sereno is the largest of Panama's coffee-producing zones, with 4,000 ha under cultivation.

Growers there say the plague would be a disaster for them, since they lack resources to control it. "The broca will arrive at the worst time for Panamanian coffee production. It will be difficult for the growers to control this plague because the majority of the fincas are in the worst condition of deterioration of the last 15 years," said grower Lucas Gomez. Gomez described those conditions as similar to those in El Salvador, with abandoned properties offering prime habitat for the bug. He said the country would lose its comparative advantage of being the only broca-free country. "What we have to do now is prepare ourselves to live with the insect, without being able to do much against it," he said. Gomez is a member of a committee working on the problem.

The committee has already held some seminars in the area to train growers. "When the outbreak comes, we will try to control it manually on the fincas. But if we don't get positive results, we will have to do it with chemical products," he said. They will first employ the technique of cleaning up every last bean after harvest, but that will be difficult because Chiriqui gets copious rainfall, causing massive fall of beans.

Boquete is another of Panama's large coffee zones that have been put on alert. There, grower Basilio Berncony said that control would be difficult without financing and government aid. He alluded to Costa Rica, where millions has been spent on the problem. In Panama, 3,340 growers produce 203,395 quintals of coffee on 231,200 ha of land.

-- End --