

CROP CRISIS CONTROL PROJECT (C3P)



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Press Release

Bujumbura – October 31, 2006: A team of researchers have confirmed for the first time that a harmful banana bacterial disease, known as Banana Xanthomonas Wilt (BXW), has made its way into Burundi's borders from neighboring countries, most likely Tanzania, Rwanda and possibly Democratic Republic of Congo. The survey was sponsored by the Crop Crisis Control project (C3P) led by Catholic Relief Services (CRS) in partnership with the International Institute for Tropical Agriculture (IITA).

BXW causes early ripening and rotting of the banana fruits, and results in the wilting and death of the plant. Left uncontrolled, BXW could have serious further impacts on the food security situation in Burundi, which was recently declared the most food insecure country in the world by the International Food Policy Research Group (IFPRG).

Bananas are considered the most important food crop in Burundi, with an estimated average consumption of 300 kg per year. Up to 25% of the cultivated area in Burundi is planted with bananas, as they serve not only as an essential food source and socio-cultural role, but also a significant income generation source, as bananas are sold both for eating and the manufacture of banana beer, known locally as « ugwagwa » and « insongo ».

Overall Survey Results

The research team, led by Gloria Nakato Valentine of the International Institute for Tropical Agriculture (IITA) and assisted by Ferdinand Ngezahayo of the Institut de Recherche Agronomique et Zootechnique (IRAZ) and Leopold Niyongabo of the Institut des Sciences Agronomiques du Burundi (ISABU), surveyed 25 border

Communes in 12 of the 16 Provinces of Burundi for signs of the disease. BXW was found in 11 of the 12 Provinces surveyed (92%) and in 23 of the 25 Communes (92%) on a total of 26 collines out of 120 collines surveyed (22%). 138 farmer fields were surveyed, and BXW was confirmed in 38 (28%) of them. A total of 30 banana plants from each farmer were surveyed.

“The bad news is that BXW has finally made its way to Burundi,” said Ms. Gloria Valentine of IITA, “but the good news is that it is still in relatively confined areas and it should give authorities and NGOs the opportunity to contain its spread to other parts of the Communes where we found the disease. The region most affected is Bubanza and Cibitoke which is the key banana producing region of the country, so particular efforts should be made there to teach farmers how to control the disease.”

Ms. Valentine also stated that the likely method of entry is either through infected banana bunches imported by local vendors or infected banana suckers brought over the border by farmers, including possibly repatriated refugees.

Control Measures

A regional program funded by USAID is planning a quick response to the confirmation of BXW in Burundi. The Crop Crisis Control Project (C3P), led by CRS, IITA, and in local partnership with IRAZ and ISABU, will be coordinating training sessions for agricultural extension agents on control techniques that can be taught to farmers across the country.

Farmers who think that their bananas are being attacked by BXW should contact their local agricultural extension agent, and local extension agents are asked to contact the Provincial DPAE office to report all suspected cases. DPAE offices should then contact IRAZ for more information. Farmers are asked not to cut their infected banana plants with their machetes, as this could then help spread the disease to other uninfected plants. The best method of insuring against the spread is to break off all the male flower buds as soon as the fruits have formed.

The BXW Pandemic

BXW causes early ripening and rotting of fruits, even in the absence of other apparent external signs of the disease. As it progresses it results in wilting and death

of the plant. Ratoon crops arising from infected mats are severely diseased and often wilt before producing bunches or produce bunches with rotten fruits. Once established in a locality, the disease can spread rapidly (up to 70 km per year) and is difficult to eradicate thereafter. Without proper management, yields in affected areas are reduced to virtually zero.

Bananas are extremely important for food security and as a source of household income in much of the Great Lakes region. Over 20 million people depend on them as the main source of livelihood. They are grown both as a staple food crop and for income generation mainly through brewing and regional export of both cooking and dessert bananas. Bananas also protect soil against erosion and leaching both through their massive root system and their aerial leaf cover. Control measures for the disease have included destruction of infected stools, which means not only a loss of food and income for farmers but also has an impact on the environment. As BXW continues to ravage plantations, soil surface left bare becomes very vulnerable to erosion especially in the hilly terrain found in much of the Great Lakes Region.

BXW is caused by the bacterium *Xanthomonas campestris pv. musacearum*. Initially, BXW was a disease that attacked another plant that is the closest relative of banana, *Ensete ventricosum*, about 90 years ago in Ethiopia. In 1974, it was first reported on bananas in Ethiopia. Then in 2001, outbreaks were reported in Uganda and the DRC. In five years BXW has spread rapidly through all the central districts of Uganda and is threatening production in the major banana producing districts in the western and southwestern parts of the country. Likewise, in the DRC, the infected area has increased substantially to cover large parts of Masisi District in North Kivu Province. In Rwanda, two infected sites were observed in Cyanzarwe district of Gisenyi Province in October 2005. The disease have been also been reported in earlier in 2006 in the Bukoba District of Western Tanzania. In September 2006, BXW was confirmed in the Teso District of Western Kenya.

About C3P

The Crop Crisis Control Project (C3P) is a regional response to the catastrophic spread of Cassava Mosaic Virus Disease (CMD) and Banana Xanthomonas Wilt (BXW) in Eastern and Central Africa.

Catholic Relief Services (CRS) and the International Institute of Tropical Agriculture (IITA) join a network of regional associations and agricultural institutes, country-level agricultural research organizations, and local partners to implement the Crop Crisis Control Project (C3P), an 18-month initiative to intensify, and bring coordination to the fight against Cassava Mosaic Virus Disease (CMD) and Banana Xanthomonas Wilt (BXW) in six countries of Central and East Africa – Burundi, Democratic Republic of Congo (DRC), Kenya, Rwanda, Tanzania, and Uganda.

Specific Survey Results

Province	Commune	Colline	BXW Confirmed?
Bubanza	Bubanza	Buhororo	Yes
"	"	Gahongoro	Yes
"	"	Kampene	No
"	"	Shari-Ruvumvu	Yes
Bujumbura rural	Kabezi	Kabezi	Yes
"	"	Migera	Yes
Bururi	Bururi	Bururi	No
"	"	Mugozi	Yes
"	"	Nyavyamo	No
"	Kiremba	Kiremba	No
"	Muzenga	Gahahe	No
"	Rumonge	Kizuka	No
"	"	Muturirwa	Yes
"	"	Rutumo	No
"	Songa	Gikuyo	No
"	"	Rutundwe	No
Cankuzo	Cankuzo	Cankuzo	No
"	"	Muterero	No
"	"	Muyaga	No
"	"	Nyabisindu	No
"	"	Nyakibanda	Yes
"	Kigambo	Kigambo	No
"	"	Musema	No
"	"	Nyakibanda	No
Cibitoke	Buganda	Murambi	Yes
"	"	Ruhagarila	Yes
"	Rugombo	Kagazi	Yes
"	"	Mparambo	Yes
"	"	Munyika	No
Kayanza	Matongo	Bandaga	No
"	"	Matongo	Yes
"	"	Musonge	No
Kirundo	Kirundo	Gikuyo	No
"	Ntega	Buringanire	Yes
"	"	Monge	No
"	"	Sasa	Yes
Makamba	Kayogoro	Butare	Yes
"	"	Kabizi	Yes
"	"	Kayogoro	No
"	Kibago	Higiro	No

“	“	Kiyange	Yes
Muyinga	Buhinyuza	Karongwe	Yes
“	“	Karongwe	Yes
“	“	Mihama	No
“	Gasorwe	Bwasare	No
“	“	Kahugu	No
“	“	Kahugu	No
“	Muyinga	Rugari	No
“	“	Rutoki	No
“	Rugari	Rugari	No
Ngozi	Busiga	Gatika	No
“	“	Murambi	No
“	Mwumba	Buye	Yes
“	“	Gakenke	No
“	“	Kabasazi	Yes
“	“	Karungula	No
Rutana	Bukemba	Bugiga	Yes
“	“	Butare	Yes
“	“	Gihofi-Kabanga	No
“	“	Kabanga	Yes
“	“	Murama-Rugwe	Yes
“	“	Nyabazimu	Yes
Ruyigi	Ruyigi	Bunogera	No
“	“	Gishingwe-Bunyuro	No
“	“	Gisoro	No
“	“	Nyabisindu	No
“	“	Rusengo	No
“	“	Rusengo	No

***n.b.** The confirmed presence of BXW on a particular Colline, Commune or Province does not necessarily mean that the entire Colline, Commune or Province is infected by BXW.*

FOR MORE INFORMATION :

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