COFFEE & COCOA INTERNATIONAL

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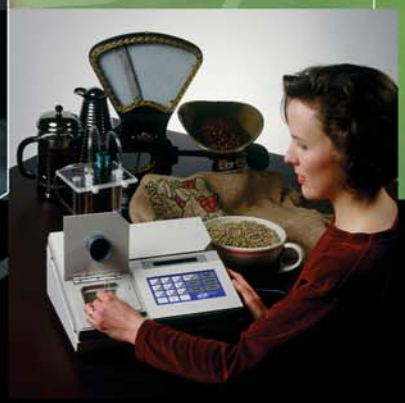
Zambia: an origin worth watching



Prices pick up on Brazilian production figures

ICO's Osorio in optimistic mood

"One global coffee industry," says Nelson

EDITOR'S COMMENT

As attention turns away from the 2003-2004 crop season to the 2004-2005 season and beyond, good news has begun to filter through into world markets of a sustained rally in prices that began towards the end of last year.

The nub of the matter is, of course, that estimates for the 2004-2005 – and very early estimates of the 2005-2006 - crop in Brazil suggest that both will be low.

Prices apart, however, the other major preoccupation in the coffee business is quality, and efforts are underway around the world in most coffee producing countries to improve quality, and to secure better prices in the process. One typical example of this trend is Vietnam.

One of the key objectives of Vietnam's 'coffee development strategy' is to improve the quality of its robusta and arabica crops. Working with the ICO's coffee quality improvement programme, Vietnamese coffee exporters are being encouraged to apply new coffee quality standards. However, it is claimed, not all coffee exporters (and importers) are very enthusiastic about using the new standards. Low quality coffee for a low price (for which there is still a good market) remains the image of Vietnam's coffee industry.

This being the case, the United Nations Food and Agricultural Organization (FAO) has been undertaking a new project since May of last year focussing on coffee quality and the prevention of mould formation and ochratoxin A (OTA) contamination of coffee in Vietnam. The main aims of the project are to educate coffee growers and processors about how to improve the quality of their coffee - and its competitiveness – reduce losses, and safeguard consumers' health by eliminating orchratoxin contamination (a subject dealt with elsewhere in this issue of *C&CI*).

The importance of the work that the FAO is doing was highlighted in mid-February when the German government announced that the Ministry of Agriculture had passed a new law, limiting ochratoxin levels in roasted coffee and in instant coffee. More countries and indeed the EU seem likely to follow suit.

Prices may at last have begun to rally, but there is a long way to go yet before the green coffee crisis can truly be said to have abated, and if recent reports from Brazil are correct, heavy rainfall there could yet push up the size of the 2004-2005 crop.

EUROPEAN UNION

New Food Law in Germany imposes lower OTA limits in coffee

As of February 13th, Germany's Minister of Agriculture passed a new law regulating maximum limits for Ochratoxin in roasted coffee (3ppb) and instant coffee (6ppb). While the EU has not yet imposed firm OTA limits for coffee, the likelihood is more countries will test due to this regulation. Italy, Spain, Finland, and The Netherlands already impose national limits. *Coffee: An Exporter's Guide*, published by the UN's International Trade Centre, supports this stating: "The toxicological status of OTA has not yet been settled but importing countries are nevertheless paying increasing attention to its occurrence in coffee and other agricultural products, and are requiring preventative measures." VICAM delivers rapid Ochratoxin test kits worldwide. Visit www.vicam.com to request more information, a copy of the German OTA law, and a bookmark with valuable coffee-related web sites.

Ochratoxin test is timely and fast

▲ *Vicam in the US has developed a new test for OTA, the OchraTest WB*

The toxicological status of one well known mycotoxin, ochratoxin A (OTA) has not been definitively agreed, but importing countries are, nevertheless, paying increased attention to its occurrence in coffee, and many require that preventative measures are taken.

Ochratoxin A is a mycotoxin produced by the fungus Aspergillus ochraceous and also by several species of Penicillium fungi. Frequently found in green coffee, ochratoxin A will remain present even after the roasting process, and is also commonly found in barley, oats, wheat, sorghum, rice, and figs.

Ochratoxin A has been known to cause kidney damage in animals and is a known carcinogen for both humans and animals.

In February, the Ministry of Agriculture in German announced strict limits on levels of OTA in coffee, and other countries are likely to follow suit, whilst, in producing nations, such as Vietnam, new efforts are being made to prevent OTA in coffee exports.

According to one recent report on the subject, "it may be safely assumed that in a few years all major coffee consuming countries will apply such measures," and this being the case, in 2000, the ICO sponsored a US $5.5 million project funded by the Common Fund for Commodities (CFC) and managed by the United Nations Food & Agriculture Organisation (FAO) to establish guidelines for mould prevention, a project which is believed to be approaching completion.

Such is the potential impact of the problem that, rightly or wrongly, were one country or grower to be publicly identified as a potential source of OTA contamination, the reputation and marketability of its coffee could be adversely affected.

Mycotoxins are caused by contamination by naturally occurring moulds. As explained in *Coffee: An Exporter's Guide*, produced by the International Trade Centre (ITC), initial contamination of coffee takes place through spores in the air and in the ground. In the right (or wrong) circumstances, the spores produce a mould, and proper moisture management throughout the processing and supply chain is therefore essential.

As the ITC guide also points out, contamination of a shipment of coffee with OTA may well be very localized, so careful inspection of the visual appearance of coffee and any mouldy or earthy smells need to be investigated.

Help could be at hand, however, for organizations needing to test for OTA, in the form of a newly developed test from Vicam in the US, the well known agricultural biotechnology and bioseparations company, which has introduced a new HPLC-only test for the detection of ochratoxin using wide bore immunoaffinity columns.

The OchraTest™ WB is the latest in a number of mycotoxin tests developed by Vicam (others include AflaTest™ WB and ZearalaTest™ WB), the wide bore of the OchraTest WB column is being designed exclusively for HPLC use, providing a faster flow rate, affording greater speed during the detection of ochratoxin.

About the OchraTest WB

The new OchraTest WB functions in an identical manner to Vicam's original HPLC-use OchraTest™, using immunoaffinity column chromatography to isolate and detect ochratoxin, whether in beer, green coffee, roasted coffee, corn, milo, feeds or wheat.

WB columns have a total volume of 3mL, compared to the total volume of 1mL found in Vicam's regular column, and the wide bore columns allow for a faster flow rate preferred by many laboratories. The OchraTest WB is also sensitive, detecting levels of ochratoxin as low as 0.25 ppb, and the wide range enables measurement up to 300 ppb.

A spokesperson for Vicam said orders are currently being accepted for OchraTest WB, and pricing information may be obtained by contacting Vicam (www.vicam.com) or a Vicam distributor. CCI

As briefly highlighted elsewhere in this issue of *C&CI*, regulatory authorities in consuming nations and in producing nations are taking an ever-greater interest in quality and in health issues associated with coffee, particularly as regards the presence of mycotoxins produced by fungi

Through development of innovative tests to ensure food quality, VICAM established itself as the industry leader in rapid mycotoxin testing. Designated by the World Health Organization as a potential human carcinogen, Ochratoxin A is found in coffee and other commodities at varying levels. As more governments have acknowledged the health risks associated with Ochratoxin A, regulations have proliferated worldwide. And, as more coffee manufacturers are concerned by the quality of coffee, the use of detection kits has increased. The preferred global method for the detection of Ochratoxin A is immunoaffinity columns with either a fluorometric readout or HPLC.

VICAM is pleased to offer the coffee industry two immunoaffinity column tests – OchraTest™ and OchraTest WB™. Both are quick, quantitative, easy-to-use immunoaffinity column tests that require no special skills, and can detect Ochratoxin A in virtually any setting. OchraTest WB is the latest in a number of HPLC-only mycotoxin tests providing a faster flow rate, affording greater test speed.

For more information on OchraTest, OchraTest WB, or other VICAM mycotoxin tests for aflatoxin, DON, fumonisin, T-2, and zearalenone, please contact your local VICAM distributor or VICAM directly:

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