

Planted Plant DNA Convicts UK Thieves

By Rebecca Sausner, January 2010

There are two facts of life in London that make the business of hauling cash a more dangerous proposition than it is in the U.S.: the bobbies don't carry guns, and the London streets and gas prices make driving giant armored trucks around an impractical solution. The result? Cash haulers are robbed at an alarming rate, with these crimes up 15 percent in the first nine months of 2009, compared with 2008, according to the British Retail Consortium.

But executives at Loomis, one of the largest cash in transit companies in the UK, think publicity around a recent court case will act as a deterrent. In the fall, Loomis helped convict a pair of robbers using DNA evidence, but it wasn't the thieves' own DNA that did them in. Instead, Loomis relied on a custom-created plant DNA substance that was added to the ink used in the degradation dye pack held inside the company's cash boxes. When robbery went down, the pack exploded and the DNA stuck to the thieves' cell phones, clothes, and of course, the stolen cash. Police were able to spot a marker of the DNA using a "rapid reader" light.

The uniquely identifiable plant DNA was created for Loomis by New York-based Applied DNA Sciences, which calls the product SigNature DNA. Loomis deployed the product out of frustration with the robberies.

"Police were finding all this cash, but we couldn't prove it belonged to Loomis because the inks we were using were used by other carriers in the UK as well," says Tony Benson, Loomis UK's risk director. "We needed something that would tie the cash back to Loomis, and also tie the cash back to the cash box it was stolen from."

Loomis has been using the plant DNA product in its inks for two years, but the recent conviction based on this evidence is what Benson believes will be "the first of many."

What sets Applied DNA Sciences' product apart from others, Benson says, is that unlike other products, and many inks, it cannot be washed off. DNA can even stick to skin for up to seven days, or as long as it takes that person to shed his or her stratum corneum or outermost layer of skin, says James Hayward, CEO of Applied DNA Sciences.

Hayward, a molecular biologist affiliated with the State University of New York at Stony Brook, says his product's reliance on true plant DNA makes it more reliable than products made from synthetic DNA. SigNature DNA also has financial services applications beyond the cash-in-transit business, Hayward says, including embedding it in the degradation dye packs kept in banks, or in ATM's like NCR's that are equipped with an ink-staining security mechanism intended to dissuade physical theft of the machine.

The company is also extending its product line to include ink and recently announcing a partnership with a Swiss dye maker to embed the DNA in a dye Hayward claims also cannot be washed away.