Report: Fungicide resistance poses serious threat to human health, agriculture

MINNEAPOLIS – The beneficial effects of fungicides are rapidly dwindling, opening a vulnerability to fungi in plants and animals, says a new report from the Institute for Agriculture and Trade Policy (IATP). *Fungicide Resistance: Risk and Consequences in Modern Agriculture* takes an in-depth look at how and why fungicide resistance is growing and the connection to agriculture and public health.

“While fungal resistance is evolutionary biology at work, there are human activities and practices that contribute to and speed up resistance,” says IATP’s VP for Communications Dale Wiehoff.

The report identifies factors such as industrial agriculture based on multi-year monocropping; the overuse and inappropriate use of fungicides to increase crop yields; the globalization of trade and the worldwide movement of crops, livestock and pests without any effective biosecurity protocols; and finally, climate change, which has shown to be a determining factor in the geographical reach and spread of fungal disease.

Despite the chemical and pharmaceutical industry’s efforts to keep up with resistance, the fungi are winning. One of the more alarming reports of 2014 came from Dutch and English researchers, saying that *Aspergillus*, a pervasive fungus that can cause serious health problems for humans, had grown resistant to a class of fungicides, Azoles, which are used on crops as well as humans. The IATP report contains two case studies on resistance to Azoles and another major class of fungicides, Strobilurins.

According to the author of the report, L.T.F. Luce, “These case studies are simply two examples of a much larger trend: the over-reliance on simple chemical solutions to complex ecological and evolutionary challenges.”

Preventing fungicide resistance by encouraging agroecological farming practices that are free of fungicides, pesticides and antibiotics is vital to public health and the environment.
“Chemical and pharmaceutical companies are responding by developing new and more powerful pesticides. They have turned to genetic modification for what is likely to be very short-term fixes that could complicate matters and create new and greater risks,” Dale Wiehoff writes in the preface of the report. “We believe far more fundamental changes are needed in how we grow and trade our food to effectively deal with these dangerous threats to food security and public health.”

Read *Fungicide Resistance: Risk and Consequences in Modern Agriculture.*