Aspergillus fumigatus is a plant-associated human pathogen that causes aspergillosis, an environmentally acquired lung disease that affects mostly the immunocompromised. The first line of treatment for invasive aspergillosis is azole antifungals, but when strains are resistant mortality is nearly 100%. Several studies have shown that resistance to azoles in A. fumigatus develops in agricultural environments where azole fungicides are widely used to combat plant-pathogenic fungi. In my seminar I will discuss why A. fumigatus and aspergillosis are a concern, the evidence that antifungal resistance develops in agricultural environments, and the environmental reservoirs of azole-resistant A. fumigatus in the United States. Lastly, I will share what we as plant pathologists and fungal biologists can do to better understand and mitigate this issue so these important compounds can be maintained for the continued treatment of plants and people.