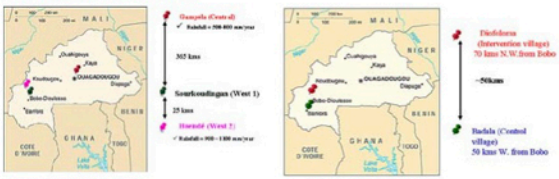
UGA145 Part IV: Aflatoxin Exposure in Rural Residents of Burkina Faso, West Africa

The fourth part of this project focused on two studies conducted in rural areas of Bukina Faso. The cross-sectional study showed high prevalence of aflatoxin exposure, and the intervention study using education and manually picking-out moody ground nuts as tools to reduce exposure, as demonstrated in the other studies which showed relative efficacy.

Study population



Cross-sectional study | Intervention study

Figure 1. Geological distribution of villages in two studies

Cross-sectional study

Table 1. Description of diet & lifestyle between West & Central

Type of cereal-based meal (% Yes)	West	Central	Sig.
Maize	92.8	28.5	▲▲
Red Sorghum	13.4	3.6	▲
White Sorghum	94.6	21.8	▲▲
Millet	10.0	97.0	▲▲
Rice	85.1	69.1	▲▲
Groundnut paste (%)			▲▲
Yes	97.4	81.8	
No	2.6	18.2	
Alcohol consumption (Liquor) (%)			▼
Yes	11.57	3.63	
No	88.43	96.36	

▲▲ $p<0.0001$; ▲ $p<0.001$; ▼ $p<0.01$

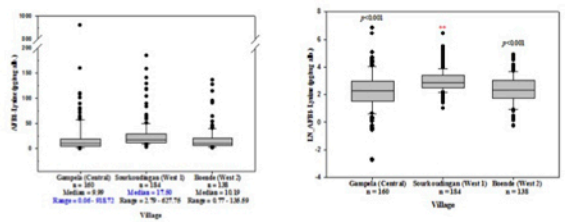


Figure 2. AFB-Lys levels among villages at phase 1 (Sep.-Oct. 2000)

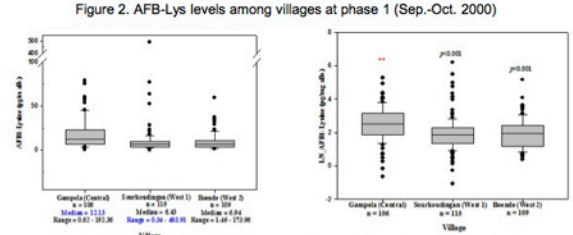


Figure 3. AFB-Lys levels among villages at phase 2 (Apr.-May 2001)

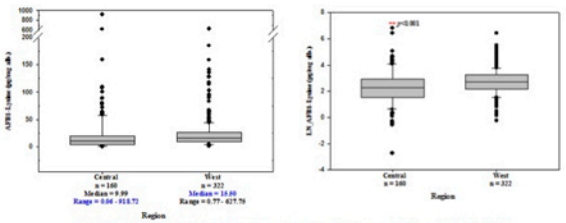


Figure 4. AF Exposure between regions at phase 1 (Sep.-Oct. 2000)

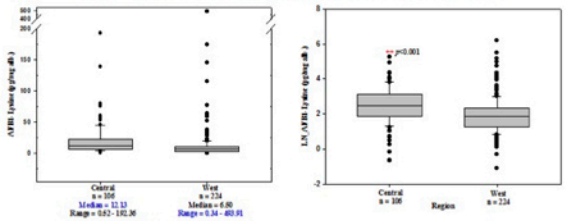


Figure 5. AF Exposure between regions at phase 2 (Apr-May 2001)

Intervention study

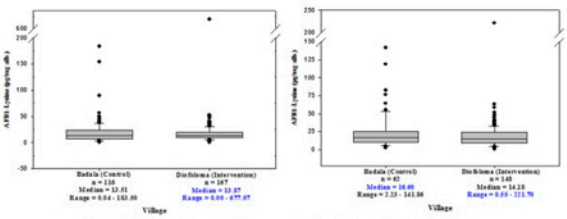


Figure 6. Comparison of AF exposures between villages & phases

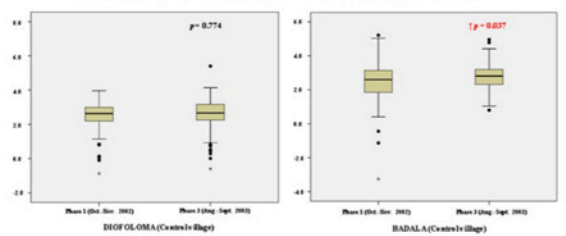


Figure 7. Comparison of AF exposure between phases (within villages)

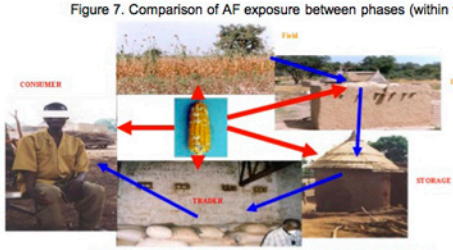


Figure 8. Corn as a potential culprit of intervention loss

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