

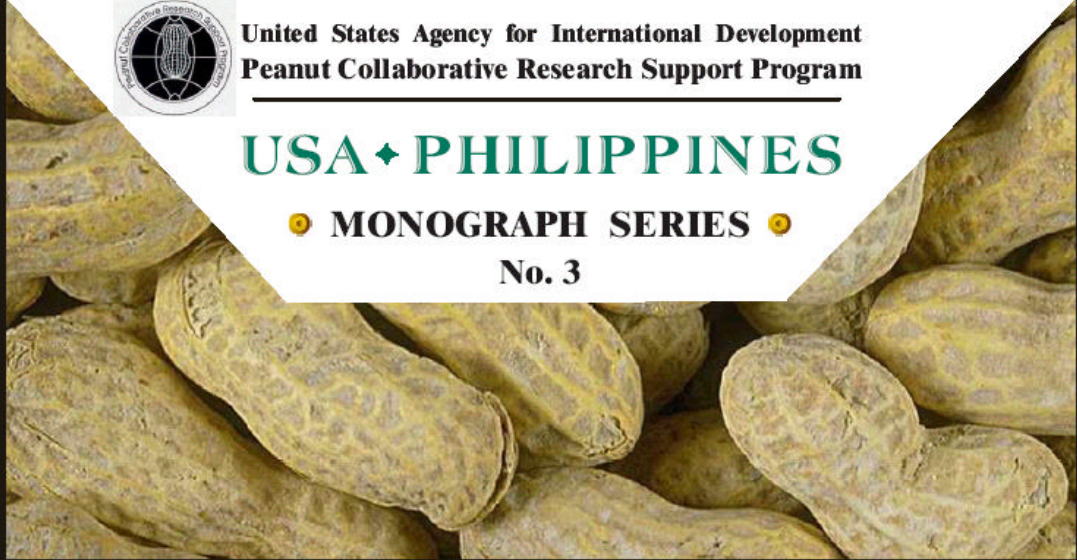


United States Agency for International Development  
Peanut Collaborative Research Support Program

**USA ♦ PHILIPPINES**

● **MONOGRAPH SERIES** ●

**No. 3**



# **CONTROL OF AFLATOXIN IN RAW PEANUTS THROUGH PROPER MANUAL SORTING**

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# **CONTROL OF AFLATOXIN IN RAW PEANUTS THROUGH PROPER MANUAL SORTING**

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## **ABSTRACT**

A manual sorting procedure to eliminate aflatoxin contamination in raw peanuts was developed. Pilot scale and verification trials using the peanut roaster at the Department of Agriculture (DA) National Food Authority (NFA) Food Development Center (FDC) were done. Blanching 20 Kg of peanuts at approximately 140°C for 25 min using the FDC peanut roaster facilitated sorting of aflatoxin-contaminated kernels after de-skinning. This rendered the dry blanched sound sorted peanuts aflatoxin-free (no aflatoxin detected), starting with raw materials with aflatoxin that was extremely high (300 ppb). Verification trials confirmed that the sorting process employed in this study was efficient in detecting and separating contaminated peanut kernels from raw materials, whether contamination was high or low. The sorting procedure was adapted to the system used at the collaborator's facilities. The blanching time that was found to facilitate proper de-skinning and subsequent sorting of the aflatoxin-contaminated peanut kernels ranged from 45 to 55 min using 50 Kg of raw peanuts. The blanching time was determined to be longer than the established blanching time since the collaborator does not preheat the roaster prior to blanching. All de-skinned sound sorted raw materials were found either not to contain aflatoxin or to contain extremely low levels.