

Title Use of ozone in detoxification of aflatoxin B₁ in red pepper
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Citation Journal of Stored Products Research, Volume 43, Issue 4, 2007, Pages 425-429
Keywords Red pepper; Ozonation; Aflatoxin B₁; Detoxification

Abstract

Red pepper (*Capsicum annuum*) is one of the most important agricultural products of Turkey. For public health and export requirements, red pepper must be produced free of hazardous contaminants. However, previous investigations showed that red pepper could be contaminated by aflatoxin above the limits that may be critical for health. In this study, use of the high oxidising power of ozone achieved detoxification of aflatoxin. Samples were subjected to ozonation at various ozone concentrations (16, 33, 66 mg/l) and exposure times (7.5, 15, 30, 60 min). In summary, the reductions of content of aflatoxin B₁ in flaked and chopped red peppers were 80% and 93% after exposures to 33 mg/l ozone and 66 mg/l ozone for 60 min, respectively.