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EVALUATION OF MYCOFLORA AND AFLATOXIN CONTENT OF CORN IN KAHRAMANMARAS REGION, TURKEY

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Corn was first discovered by Columbus's men on March 6, 1492 on the island of Cuba. Then, it was introduced to Europe. It is commonly grown for food and feed in Turkey. Total production is about 3.500.000 metric tons and average yield is about 437.6 kg/da. It is the third most important crop followed by wheat and barley in Turkey. Mycotoxin contamination is one of the most important limiting factors for corn production. Therefore, we conducted a survey for mold and aflatoxin contamination between 2005 and 2007 for three years. Moisture contents of corn samples ranged from 11 to 30 %. Second crop corn had significantly higher moisture contents than first crop corn. *Penicillium*, *Fusarium* and *Aspergillus* ssp. were the most abundant fungal genus present in corn kernels. Our results showed that incidence of *Penicillium* was significantly higher than *Fusarium* and *Aspergillus* spp. Mold counts for corn samples varied from $1.7x10^3$ to $5.2x10^7$. Significantly higher mold counts were obtained from second crop corn. For total aflatoxin, of 28 corn samples, 9 had aflatoxin above the limit (10ppb) in second crop corn, although only 2 of the 50 samples had aflatoxin levels above the limit in first crop corn.

Key words: Corn, Kahramanmaras, mycoflora, *Penicillium*, *Fusarium*, *Aspergillus*, aflatoxin