

The mould symphony

Composed by Dilek Heperkan



Aflatoxin producing fungi in the literature

- *A.flavus*
- *A.parasiticus*
- *A.nomius*
- *A.oryzae*
- *A.sojae*
- *A.tamarii*
- *Petromyces alliaceus*
- *P.albertensis*
- *A.lanosus*
- *Emeriella venezuelense*
- *E.acristata*
- *A. bombycis*
- *A. pseudotamarii*

produce aflatoxins

whereas the other three species in the section Flavi do not produce aflatoxins.

CPA producing moulds in the literature



P. cyclopium → *P. griseofulvum* → *P. verrucosum*
subgenus *cyclopium*

- *P. camembertii*
- *P. commune*
- *P. griseofulvum*
- *P. palitans*
- *A. flavus*
- *A. versicolor*
- *A. oryzae*
- *A. tamarii*

A. flavus → CPA & Aflatoxin
co-occurrence

Aflatoxin and CPA producing
molds in Turkish figs

Aspergillus section Flavi

- *A.flavus*



- *A.parasiticus*



- *A.tamarii*



- *P.commune*



Do not produce aflatoxin

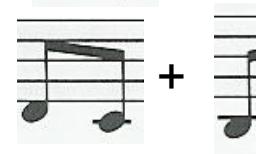
Aflatoxin B₁



Aflatoxin B₁ B₂



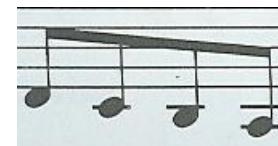
Aflatoxin B₁B₂G₁



CPA



Aflatoxin B₁ B₂G₁G₂



CPA



CPA



OTA producing molds in the literature



Aspergillus section *Nigri*

- *A. niger* var. *niger*

A. niger agg.

A. foetidus

A. awamori

- *A. carbonarius*
- (*A. japonicus*)

- Other *Aspergilli*
- *A. ochraceus*
- *A. terreus*
- *Penicillium verrucosum*
- *P. chrysogenum* ?
- *P. commune* ?

Aspergillus section *Nigri* and other OTA producing molds in Turkish figs

***Aspergillus niger* agg.**



A.foetidus



A.awamori



A.carbonarius



A.terreus



Citrinin
patulin?

OTA

OTA

OTA

OTA



Other mycotoxin producing molds in Turkish figs

- *P.chrysogenum*



- *P.citrinum* 🎵



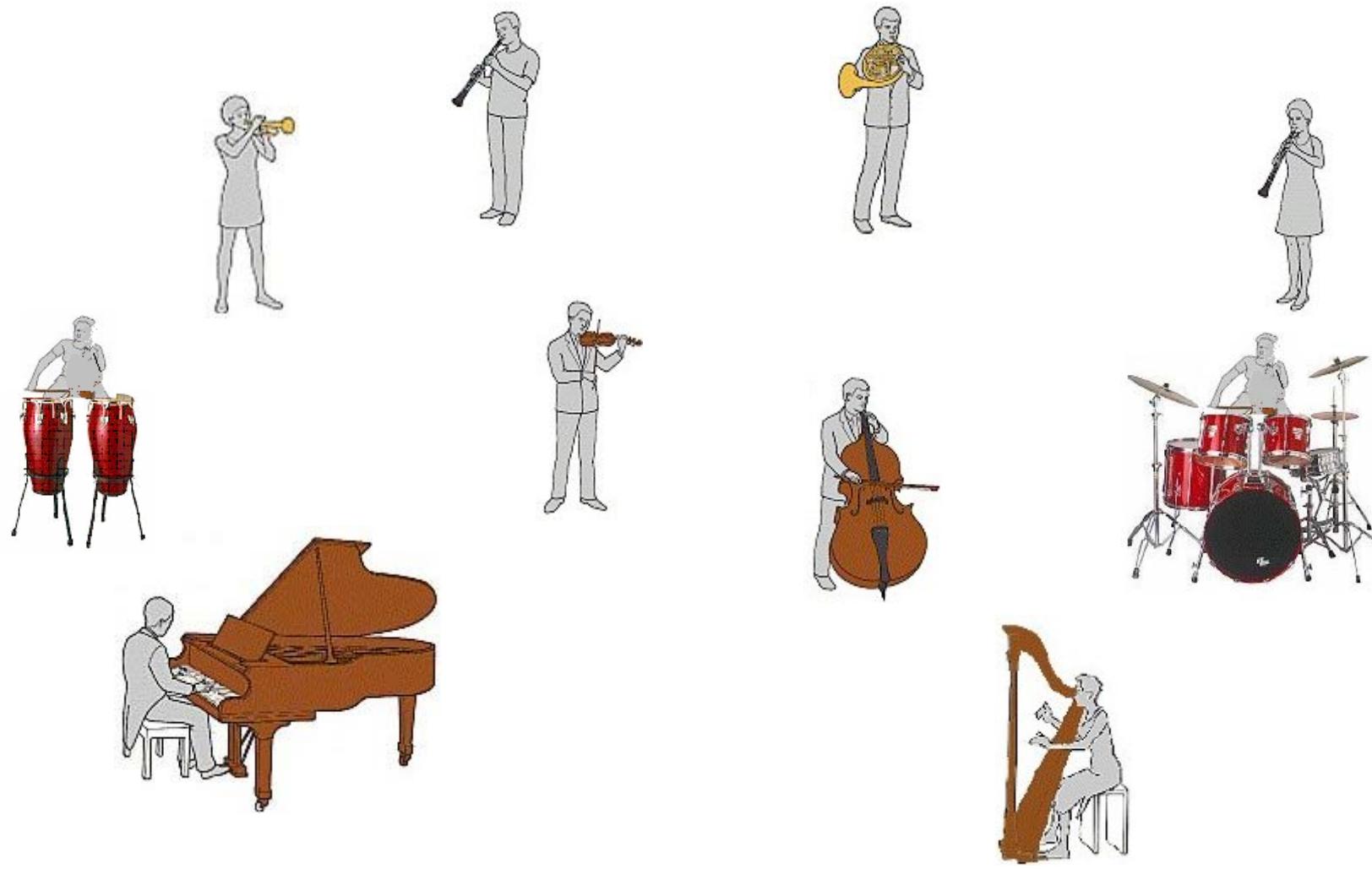
- *Fusarium verticilloides/ proliferatum*



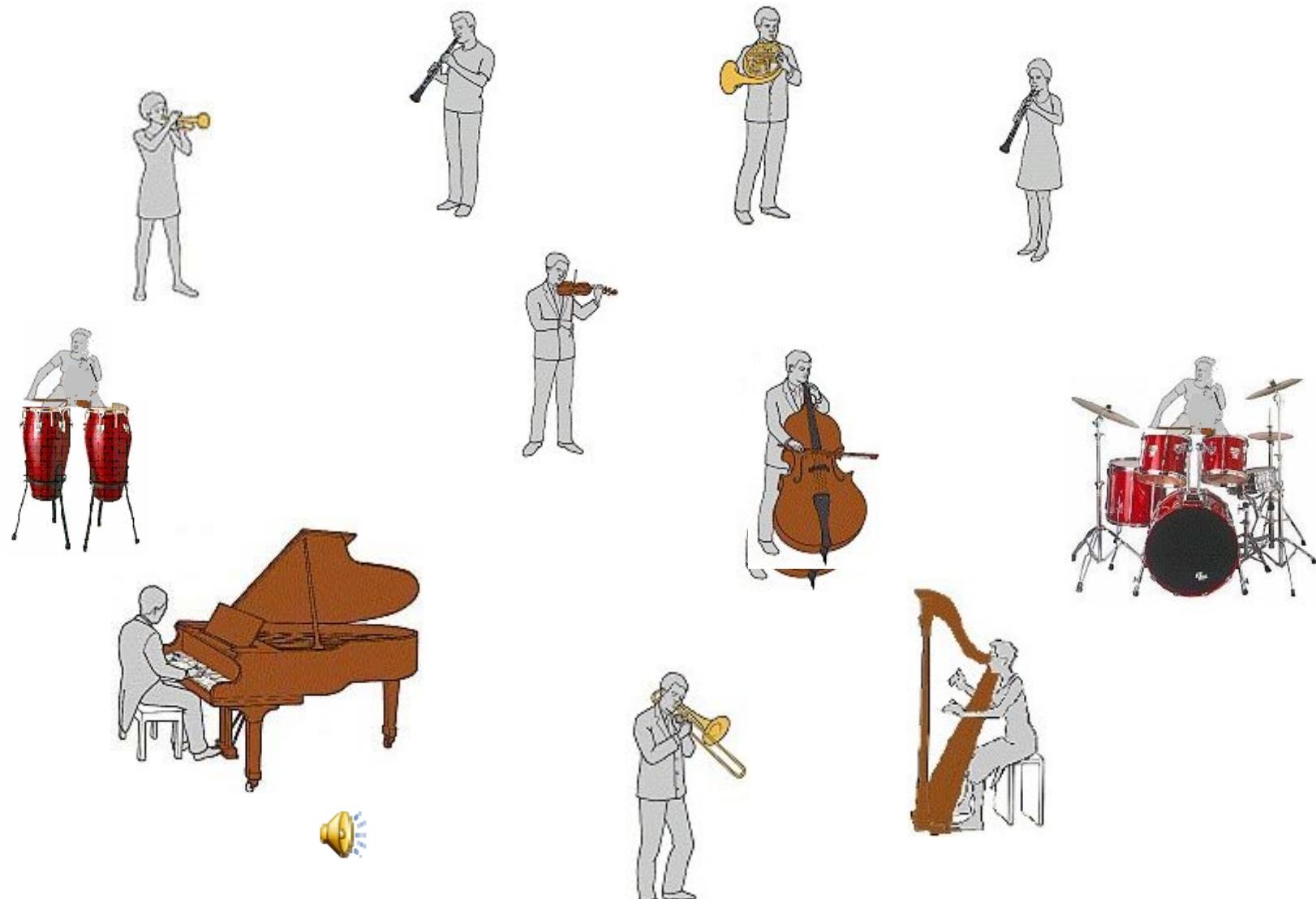
- Citrinin

- Fumonisin

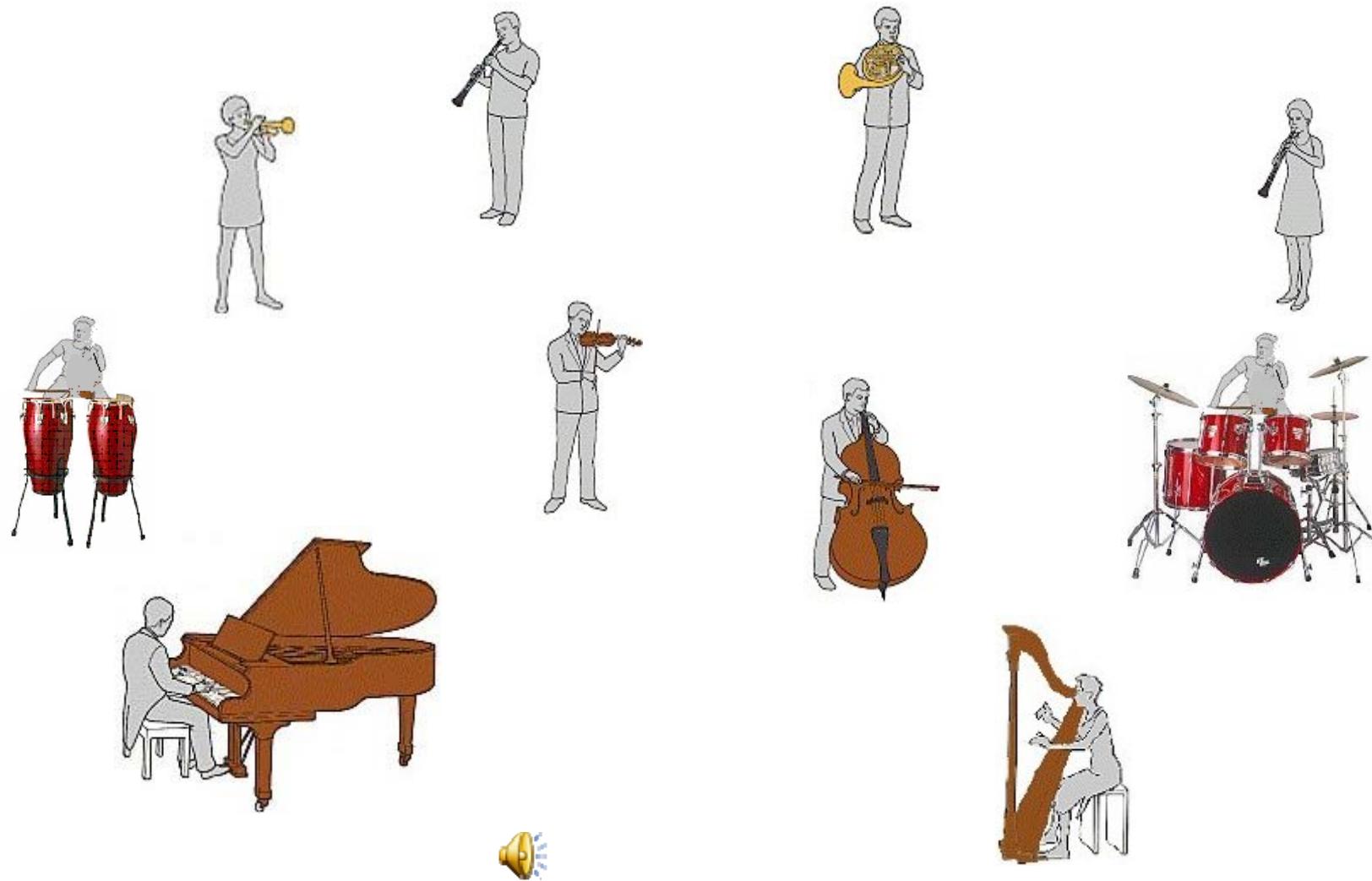
- Which tunes they play depends on the region. Therefore although the instruments are the same the outcoming melody (collection of tunes) is different.
- Here are three applications



Turkish fig 🎵



American fig



Mexican fig