

Analysis of mycotoxins - ochratoxin A, chitorinin, patulin, and penicillic acid

4 components of mold venom, Ochratoxin A, Chitorinin, Patulin and Penicillic Acid were analyzed on a reversed phase chromatography.

Fig. 1 shows the chromatogram of the standard mixture. Patulin and Penicillic acid were detected with a diode array detector (MD) and Chitorinin and Ochratoxin A were detected with a fluorescence detector (FL).

Keywords : 1. Aflatoxins, 2. STD mixture, 3. ODS, 4. FL, 5. TFA derivatization

Conditions:

Column:	CrestPak C18S
Eluent A:	0.1% H ₃ PO ₄
Eluent B:	CH ₃ OH
Time(min)	0 30 30.1
A(%)	95 0 95
B(%)	5 100 5
1cycle	45min
Wave length:	MD-200~400nm (PenicillicAcid, Patulin) FL-Ex;335nm, Em;515nm(Chitorinin) FL-Ex;327nm, Em;462nm(Ochratoxin A)
Flow rate:	1.0mL/min
Column temperature:	40 degree celsius
Injection volume:	10uL
Sample:	STD mixture Ochratoxin A(0.5ppm) Chitorinin, Patulin and Penicillic Acid(5ppm each)

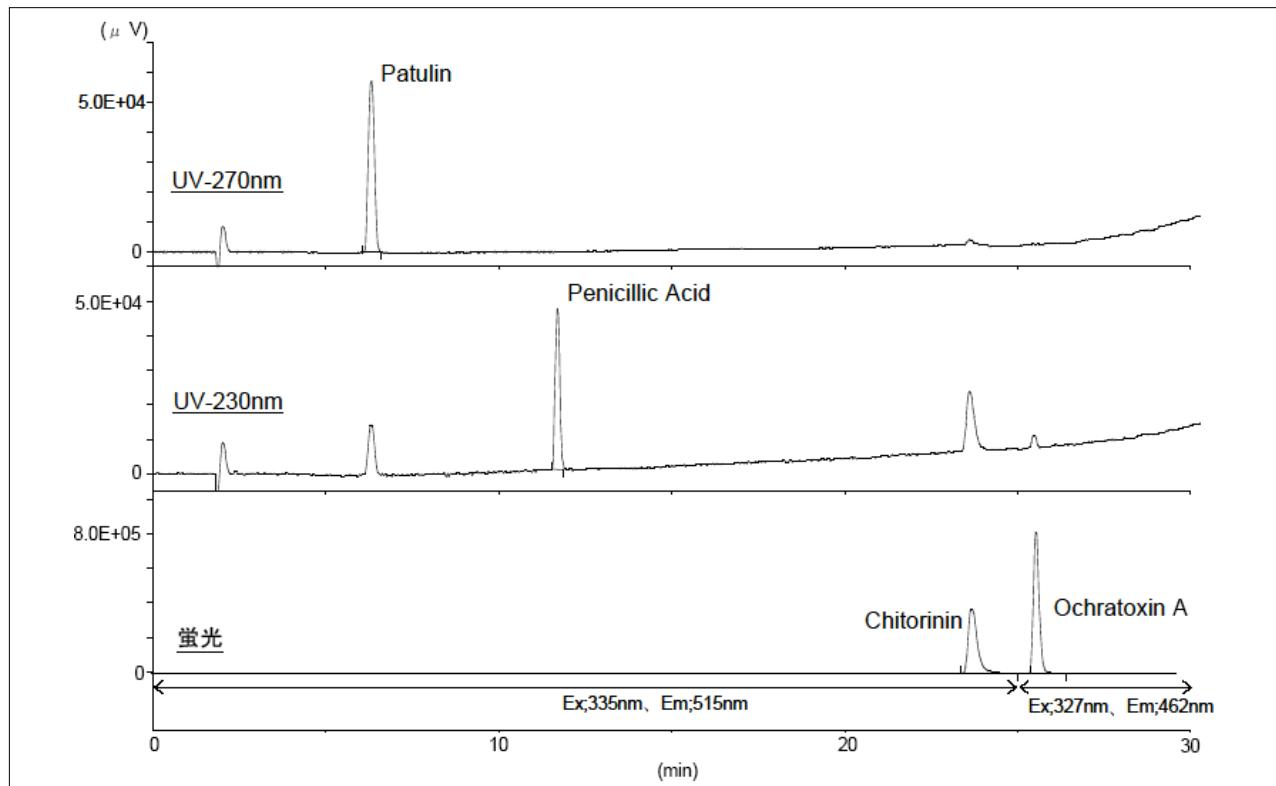


Fig.1 Chromatogram of 4 components of mold venom in standard mixture