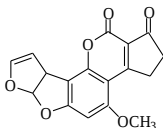
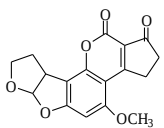
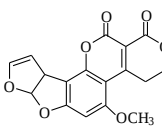
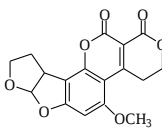


Table (2-1): Chemical properties of aflatoxins

Name	Aflatoxin B1	Aflatoxin B2	Aflatoxin G1	Aflatoxin G2
Structure				
CA Name	Cyclopenta[C]furo[3',2':4,5]furo[2,3h][1]benzopyran-1,11-dione,2,3,6a,9a-tetrahydro-4-methoxy-,(6aR,9aS)-	Cyclopenta[C]furo[3',2':4,5]furo[2,3h][1]benzopyran-1,11-dione,2,3,6a,8,9,9a-hexahydro-4-methoxy-,(6aR,9aS)-	1H,12H-furo[3',2':4,5]furo[2,3-h]pyrano[3,4-c][1]benzopyran-1,12-dione,3,4,7a,10a-tetrahydro-5-methoxy-,(7aR,10aS)-	1H,12H-furo[3',2':4,5]furo[2,3-h]pyrano[3,4-c][1]benzopyran-1,12-dione,3,4,7a,9,10,10a-hexahydro-5-methoxy-,(7aR-cis)-
Other trivial name		Dihydroaflatoxin B1		Dihydroaflatoxin G1
Registry Number	1162-65-8	7220-81-7	1165-39-5	7241-98-7
Molecular Formula	C ₁₇ H ₁₂ O ₆	C ₁₇ H ₁₄ O ₆	C ₁₇ H ₁₂ O ₇	C ₁₇ H ₁₄ O ₇
Molecular weight	312.3	314.3	328.3	330.3
Solubility	Soluble in water and polar organic solvents			
Complete synthesis	Yes, but large-scale synthesis is impractical. The metabolic pathway of aflatoxin biosynthesis is very complex and it is likely that it will be manufactured using strains of producer organisms manipulated to maximize yields.			