UEM-M Biological experimental procedure

Detection of aflatoxin B1

1. First, to obtain the extract , methanol and pure water were mixed in a ratio of 8:2 to obtain a 80% methanol - water ;
2. Put the sample containing aflatoxin B1 uniformly pulverized 20g to UEM-M bath.
2. Mix the sample and extract.
3. Turn on the UEM-M, set “frequency one”, processing 5 minutes.
4. After treatment for 5 minutes, take 200uL of treated supernatant.
5. Put the 200uL supernatant into microporous, repeatedly pipetting to the bottom of the microporous to make sure it is dissolved with the red material;
6. Insert the test strip aflatoxin B1, for testing.
7. If the display is positive, then this means that the UEM-M frequency corresponding to the supernatant of disrupted cells can be efficiently extracted aflatoxin B1;
8. If the display negative, it means the device does not successfully extracted aflatoxin B1, proceed with treatment experiments. Set the UEM-M to next frequency and repeat the above steps.
9. The frequency with the shortest and successful extraction of aflatoxin B1 is the optimum frequency of UEM-M to extract aflatoxin B1.

Summary:

1. If the extracted material can be detected by sensor, the processes can realize full automation with feedback control.
2. After successful experiments, the optimum frequency can be fixed for future experiments or production.
3. UEM-1 is available for customizing the specified frequency obtained from experiment.
4. Factory can help users do the experiment and provide UEM-1 for extraction of a kind of material.

Deviser Technology Ltd.