Water Activity Testing Standard Operating Procedure

1. Make sure that the sample to be measured is homogeneous.

2. Place the sample in a disposable sample cup, completely covering the bottom of the cup, if possible.

3. Do not fill the sample cup more than half full since overfilled cups will contaminate the sensors in the sampling chamber.

4. Make sure that the rim and outside of the sample cup are clean.

5. Turn the sample drawer knob to the OPEN/LOAD position and pull the drawer open.

6. Place your prepared sample in the drawer. Check the top lip of the cup to make sure it is free from sample residue (remember, an over-filled sample cup will contaminate the chamber’s sensors).

7. Carefully slide the drawer closed, being especially careful if you have a liquid sample that may splash or spill and contaminate the chamber.

8. Turn the sample drawer knob to the READ position to seal the sample cup with the chamber. This will start the read cycle. In about 40 seconds, the first \( a_w \) measurement will be displayed on the LCD. Length of read times may vary depending on temperature differences between the chamber and your sample, and other properties of your sample.

9. When the AquaLab is finished measuring your sample, it will beep (if beeper enabled) and the green LED will flash. The water activity and the sample temperature will be displayed on screen.

10. It is advisable to conduct at least 2 tests runs on each sample and either average the readings or take the last reading. More readings may be needed for slow water emitting sample. Decagon’s custom mode can facilitate this process (see manual for details).

11. Remove sample from drawer when finished sampling.

Note: Do not leave samples inside the chamber overnight or for extended periods of time, as this can contribute to contamination of the chamber.