

Bryophytes



"A Marchantia plant is shown growing. This is a great example of flabellate dichotomous branching. The apex divides into two (dichotomous) branches that are equal in size and it occurs in a fan-like (flabellate) shape, all in a single flattened plane."

from: Jessica M. Budke Storm, Connecticut, United States



"Watch gemmae grow inside of a gemmae cup. Gemmae are small discs of plant tissue. They are located inside a splash cup. When raindrops fall into the cup they dislodge the gemmae and splash them out onto the soil. One gemmae can grow into an entirely new Marchantia plant. This is a form of asexual reproduction."

from: Jessica M. Budke Storm, Connecticut, United States



"A drop of water is added to the surface of an antheridiophore. This is an umbrella shaped structure that houses the antheridia, the organs that produce sperm. When the water is added some cloudy areas appear in the liquid."

from: Jessica M. Budke Storm, Connecticut, United States



"This is a zoomed in shot of the previous video. Sperm are being released from a pore in the surface of the antheridiophore. The antheridia are located in cavities below the surface of the plant."

from: Jessica M. Budke Storrs, Connecticut, United States



"Even more zoomed in. Aren't microscopes fabulous! Here you can see the flagellated sperm swimming in a twirly, spiral dance."

from: Jessica M. Budke Storrs, Connecticut, United States



"These umbrella-shaped structures growing out of the thallus are archegoniophores. They house the archegonia, the organs that produce and contain eggs."

from: Jessica M. Budke Storrs, Connecticut, United States



"This video shows spores being released from the sporophytes on the archegoniophores. The umbrella-tops of the archegoniophores have flipped up, as though they were blown inside out in a strong wind. All of the particles blowing around in the breeze are spores. Each of these spores can land and grow into an entire new Marchantia plant."

from: Jessica M. Budke Storrs, Connecticut, United States



