

# **PLANT PROPAGATION LAB**

## **PUNAHOU 9<sup>TH</sup> GRADE SCIENCE**

### Peat

- 1) Is peat an organic substance or inorganic substance?
- 2) What do you think peat is made up of?
- 3) Does peat have good water drainage?
- 4) Is peat easy to wet?
- 5) Does peat stay hard and compact after wetting?
- 6) What will happen to peat if it dries out?
- 7) Give some reasons why a plant propagator may use peat as a planting media.

### Perlite

- 1) Is perlite organic or inorganic?
- 2) Do you think perlite will retain water?
- 3) What is the texture of perlite? (Texture = particle size)
- 4) Is perlite easily dispersed in the planting mix?
- 5) Are there large pore spaces between pieces of perlite?
- 6) Do you think light will penetrate between pieces of perlite?
- 7) Why would you add perlite to a planting media?

### Vermiculite

- 1) Is vermiculite organic or inorganic?
- 2) How do you describe the physical appearance of vermiculite?
- 3) How is vermiculite different than peat and perlite?
- 4) Does vermiculite retain water?
- 5) What is the size of pore spaces between pieces of vermiculite, if any?
- 6) Do you think light is reflected by vermiculite?

### Volcanic Cinder

- 1) Are the pieces of cinder light or heavy?
- 2) What is the texture of volcanic cinder?
- 3) Does volcanic cinder hold water well?
- 4) Do you think volcanic cinder would get too hot if exposed to full sunlight?
- 5) Is volcanic cinder solid or porous?
- 6) Why would you put volcanic cinder in a planting media?

### Potting Soil

- 1) What is the texture of potting soil?
- 2) Can you identify the amendments that make up potting soil?
- 3) Do you think there is sufficient air space between the amendments?
- 4) Does potting soil drain water well?
- 5) Is it easy to wet potting soil?
- 6) What do you think will happen if potting soil dries out too much?

### Planting Mixes

- 1) Describe the properties of the peat/perlite mix.
- 2) What is the effect of peat on water holding capacity of the mix?
- 3) What is the effect of perlite on the planting mix?
- 4) How do vermiculite and perlite interact?
- 5) Do you think this media (vermiculite/perlite) will be well aerated (aerated = air flow through particles)?
- 6) Will the vermiculite/perlite mix dry out too quickly?
- 7) What did the addition of volcanic cinder do to the potting soil?
- 8) Is this mix easy to wet?
- 9) Which mix do you predict will give the best results for cuttings?