

Improving potting composts with Vermiculite, Perlite and Grit

Vermiculite, Perlite, horticultural grit and grit sand can all be used to improve the drainage and aeration of potting composts. Which to choose?

Vermiculite is naturally occurring mica mineral. It is often added to growing media for seed sowing because it maintains air spaces thereby assisting drainage. It can trap moisture and helps to retain nutrients. It is useful as a seed covering because it insulates the seeds and keeps them in contact with the moist compost without impeding emergence of seedlings.

Perlite is derived from igneous rock which is heated to high temperatures, requiring a large energy input. It is lightweight granular product. It is dusty, and it is recommended that it is dampened in the bag before handling. It does not have the water and nutrient holding capacity that vermiculite has. It is added to growing media to improve aeration and drainage.

Horticultural grit and grit sand is washed and lime-free. It improves drainage and adds weight to growing media. It is often added to composts which need to be free draining, for example for growing alpines (see leaflet), and bulbs. Horticultural grit also makes an attractive cover for exposed compost, reducing water loss due to evaporation.

Recommendations.

- **Sowing seeds.** Add medium-grade vermiculite to seed compost. RHS research suggests peat-free composts such as New Horizon benefit from sieving and adding vermiculite at a ratio of 1:4 by volume (see article). Cover seeds with a layer of vermiculite.
- **Striking cuttings.** Add medium-grade perlite or grit to peat-free composts after sieving in a ratio of 1:8 by volume.
- **Making composts for alpines or bulbs.** Use grit or grit sand. See leaflet or specialist book for further information.
- **Making hanging basket compost.** Adding perlite will make the compost lighter.