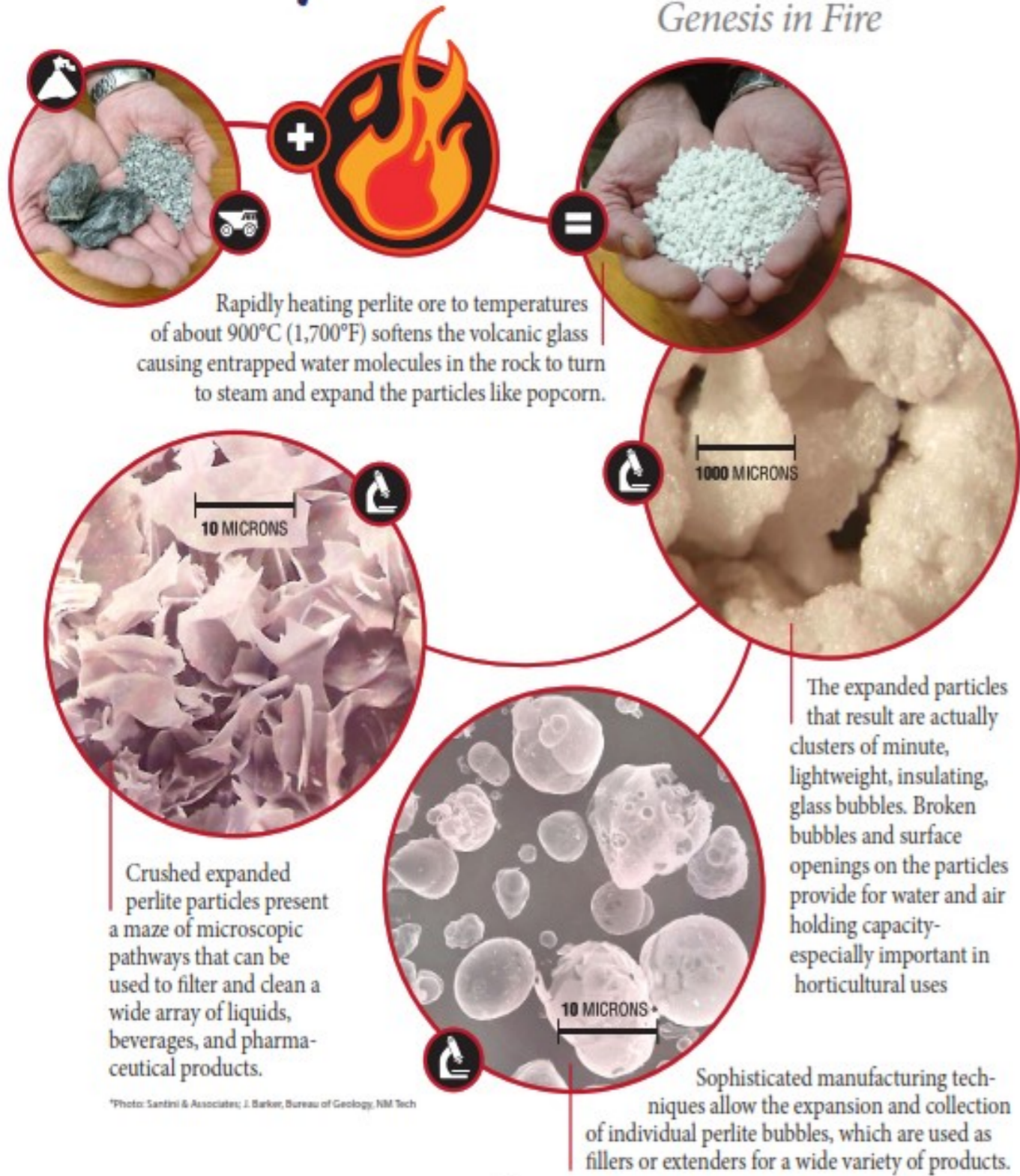


Why Perlite Works

Genesis in Fire



Perlite is a 100% natural volcanic glass mineral formed by the sudden cooling and solidification of volcanic ash, which traps crystalline water into its mass. Perlite's most important natural property is the ability to expand when rapidly heated in temperatures of 800°C – 950°C. The abrupt, controlled rise of temperature when we heat perlite causes the formation of white minuscule glass bubbles. Perlite melts and expands in an extremely porous surface and increasing its volume between 10 and 14 times, which in turn results in superior thermal insulation and sound proofing properties, as well as an extreme lightness (weights 32-240 kg/m3). As a volcanic glass Perlite is non-flammable. These characteristics, make perlite an . The surface of each particle is covered with tiny cavities which provide an extremely large surface area. For Agricultural and Horticultural applications; these surface cavities trap moisture before they pass through underground and make it available on demand to plant roots and to the stems of cuttings. In addition, because of the physical shape of each perlite particle, air passages are formed in the growing mix providing optimum aeration. The development of near ideal structural conditions in growing and propagating media is made possible by the following characteristics of agricultural perlite:

Improves Aeration and Drainage, Makes Moisture and Nutrients Readily Available to Plants, Is Inorganic and does not deteriorate, Has Essentially Neutral pH of 6.5 to 7.5. Serves as an insulator to Reduce extreme soil temperature fluctuations, Is Sterile and free of weeds and disease, Is Clean, Odorless, Lightweight, and Safe to handle.



Perlite's Unique Water Holding Ability

MaxPozz Agricultural Perlite particles have a closed cell structure with a multiplicity of tiny crevices on their surface. These crevices trap water and hold it against drainage and evaporation, yet making it available to plant roots on-demand. As a result, available water does not drain away but the optimum amount of water for plant growth is maintained where the roots need it to ensure optimum plant development. Particles of *Agricultural Perlite* will **retain from three to ten times their weight in water**. Water retention by *Agricultural Perlite* is not an indiscriminate action. The amount of water adsorbed on the surface of perlite particles is a function of the particle size distribution. Coarser perlite particles adsorb less water than finer particles. Thus, by adjusting the range of particle size employed, the amount of moisture retained can be carefully regulated to suit particular requirements. This enables the grower to prepare the optimum mix for each type plant being grown.

Perlite's Olive Tree Propagation Testimonial

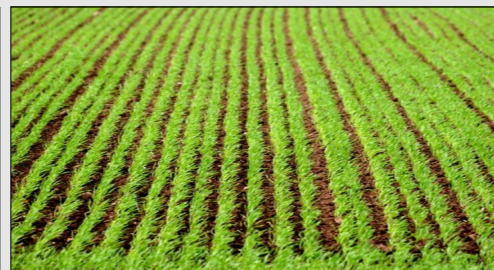
Important agricultural products in the Mediterranean area are olives and olive oil. On the island of Cyprus, the traditional method of raising olive trees was from seed followed by grafting. The method was time consuming and not always successful. Now, through the use of cuttings rooted in *Agricultural Perlite*, the time to first production has been reduced by as much as 40%. Not only has water usage been dramatically reduced but labor costs have been cut and tree survival rates increased. Following trials with several mix combinations, the Institute of Agricultural Research in Cyprus recommended *Agricultural Perlite* with 10% to 15% sphagnum peat as the best mix. *Agricultural Perlite* has a normal neutral pH of 7 and sphagnum peat was added to lower the pH to 6.5-7 which is more suitable for olive tree propagation. *Agricultural and Horticultural Perlite* was specified because it maintained a more uniform moisture and temperature level, was sterile and had good drainage characteristics.



Buildings Natural Insulation

Water Filtration

Soil Amendment



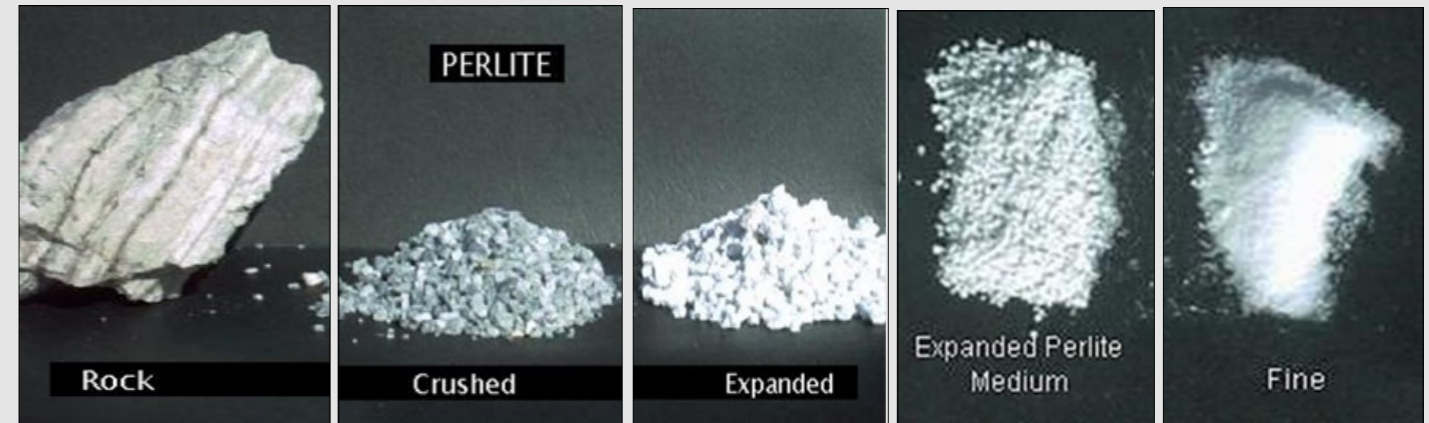
PERLITEUS, Inc. Offices: San Diego - New York - USA - BC - Guerrero - México

Contact: dcorrea@ghrnet.com - 1-(619)752-6766 - www.globalhabitatresources.com



Perlite Raw and Expanded

For Sustainable Habitat Applications
VARIED PROPERTIES WITH MULTI USES



Processed Raw Perlite

Applications of Perlite

the Versatile Mineral

