

More About Vermiculite

Vermiculite as suggested for rooting cuttings in bulletin 13 is obtainable from most building supply dealers. It is used as house insulation and is commonly sold under the name - Zonolite. Vermiculite is produced by the International Vermiculite Co., Girard, Illinois. When manufactured for horticultural use, Vermiculite is sold as Terra-Lite. You can get the name of your nearest dealer by writing the Vermiculite Research Institute, 2540 Eastwood Ave., Evanston, Illinois.

Vermiculite was described by Stuart in a paper reviewed in bulletin 3. The ore from which it is made is obtained in Montana. It is heated to 2000°F. which fluffs the material to a very porous structure possessing very high water-holding capacity and excellent capillary movement of water.

The house fill, or size no. 1, grade is used for rooting cuttings. The grade known as concrete aggregate, or size no. 2, is used for seeding purposes. Seedlings must be fertilized as soon as they appear. A tablespoon of 5-10-5 fertilizer in a gallon of water, shaken well and poured over the vermiculite or in the pot when Neponset liners are placed in flats and arranged for watering in the pot, will give a good solution for fertilizing the plants.

Not only is Vermiculite excellent for rooting geraniums, but we have found it equally good for everything tried. Chrysanthemums, roses, carnations, poinsettias, begonia and Saintpaulia leaves, and other miscellaneous materials.

Cost of Vermiculite

The present price of Vermiculite in Ithaca is \$1.50 for 4 cubic feet. You need about 3 inches in the propagating bench if you are going to use the constant water level. This means you will pay about 10 cents per sq. foot for the material to place in the bench.

Burt O. Smith of Kennett Square, Pa. is using it for rooting in his year-around mum production program. He says the difference in price as compared with sand is offset in the bench filling operation and resulting better cuttings. It took two men thirty minutes to fill his bench with Vermiculite (5" x 37" x 120"). Thirty bags, each holding four cubic feet of Vermiculite, were used. Two men worked eight hours and used 5 1/2 cubic yards of sand to fill the same bench.

	<u>Sand</u>	
16 hrs. labor	⊙ \$1.00	= \$16.00
5.5 cu. yds. sand	⊙ \$2.00	= 11.00
cost per sq. ft.	\$0.07	<u> </u>
		\$27.00

	<u>Vermiculite</u>	
30 bags	⊙ \$1.50	= \$45.00
1 hr. labor	⊙ \$1.00	= 1.00
cost per sq. ft.		<u> </u>
		\$46.00
	\$0.12	

Mr. Smith allows his cuttings to become well rooted in the Vermiculite and when they

are pulled from the bench they carry a large ball of it. These cuttings planted in soil never wilt. This removal of Vermiculite necessitates replacing about 1/3 the original amount after each batch of cuttings.

You don't have to sterilize Vermiculite the first time you use it. It is sterile. You should sterilize it for each later batch of cuttings if some rot occurs. So far, Mr. Smith has rooted 3 lots of cuttings without sterilizing and he has had no trouble with rot.