

CapeOrganic Guidelines for

Technical Information

Francis R. Gouin, Ph.D.
Department of Horticulture
University of Maryland

Hardy Chrysanthemums Potting Mixes and Fertilizer Programs

The hardy chrysanthemum is not considered a money-making crop by growers; however, many grow it to keep employees busy during summer months and to satisfy customer needs. By using **CapeOrganic** in blending both propagating and growing media, the cost of formulating your own growing medium can be reduced by nearly 40%, and the fertilizer requirements can be substantially reduced without sacrificing plant quality. In many instances, growers will even notice improved plant quality over their present method. This is because **CapeOrganic** is a sterile material and does not need to be sterilized. It has good buffering capacity with a pH of near 6.5, meaning that no lime is needed. It is rich in essential trace elements so none have to be added, and it is also rich in most of the major elements essential for plant growth. Generally only nitrogen needs to be applied for normal growth of chrysanthemums, but using a complete fertilizer will not create any problems.

Propagating and Growing Media

It is not recommended that topsoil be used for blending growing media containing **CapeOrganic**. Topsoil is highly variable. It is contaminated with weed seeds, insects and diseases and must be sterilized. When blended with **CapeOrganic** it substantially reduces the air-filled pore-space of the resulting medium. If topsoil is blended with **CapeOrganic** it should not be used in excess of 20% by volume. Steam sterilization of **CapeOrganic** increases the soluble salt concentration of the resulting medium and also destroys the naturally occurring fungicidal properties of **CapeOrganic**.

	PROPAGATING MEDIUM	GROWING MEDIA	
	1 CapeOrganic	1) 2 CapeOrganic	2) 1 CapeOrganic
<i>(Recommended Mixes by volume)</i>	1 Peat Moss	1 Peat Moss	1 Peat Moss
	1 Vermiculite or Perlite	1 Coarse Sand	1 Coarse Sand
	Add ½ to 1 qt. of granular AQUAGRO per cu. yd. of mix.		

Propagating Your Own (least costly)

The following schedule is recommended for growers who have propagating facilities. Have unrooted cuttings shipped and ready for sticking during the first week in May. Root the cuttings in cell-packs or 2-1/4" peat pots or strips filled loosely with the suggested propagating medium. Treating the base of each cutting with rooting hormones is not always necessary depending on the cultivar. The cuttings **should be stuck as shallow as possible** into the propagating medium, watered heavily and placed under extended sixteen hour days with intermittent mist of four to six seconds every two minutes from sunrise to sunset. Most hardy chrysanthemum cultivars will be heavily rooted within two weeks.

The potted liners should be removed from under the mist as soon as they are well rooted, kept under extended day length but placed in full sun. Within one week after removing the potted liners from under the mist they should be fertilized regularly with 250 ppm of N from a 25-10-10 or 25-5-20 liquid fertilizer or 46-0-0 urea (Repeated studies have demonstrated that N is truly the only fertilizer that is needed). The plants should be pinched frequently, by shearing at two to three week intervals to stimulate branching and to keep the plants from getting "leggy". Discontinue shearing by July 21, to allow flower buds to develop. This system allows you to use only one plant per pot when moving them into the field.

Questions about **CapeOrganic** and its uses can be answered by calling the
Cape May County Municipal Utilities Authority's Compost Facility at (609) 465-3968 ext. 230.