



## Care and Feeding of Pansies and Violas

The nutritional requirements of pansies and violas differ from warm-season bedding plants because they are trying to grow and flourish during cold, wet weather. In cold, wet soils, the warm-season soil bacteria that normally make the conversion from ammoniacal and urea nitrogen, to the *nitrate form which pansies and violas prefer*, are dormant. Because of this dormancy, putting ammoniacal and urea forms of fertilizer on pansies in the winter will often result in toxic ammonia with little or no food actually available to the plants.

The formulations below contain predominantly nitrate-based nitrogen, which is readily available in winter soils and also promotes compact, sturdy growth when weather turns warmer. There are two downsides of nitrate fertilizers: 1) they have no slow-release capability, so their effects are diluted by heavy rains or excess watering. Therefore, they have to be applied more often than slow-release formulations. 2) They tend to raise the pH in soils with little buffering capacity, so pH may have to be monitored.

### Pansy Formulations available from Barton's

#### Granular 14-2-18 (13.4% nitrate)

Apply 1# per 100 sq. ft. every three weeks. (\* Measuring - if you don't have a scale, 14 oz. of 15-2-20 in a measuring cup is approximately equal to 1 lb.). Sidedress if possible, but if top dressed, apply fertilizer when foliage is dry, and brush off of foliage to prevent damage. The granular formulation is more convenient than the water-soluble one below if a large water spray tank is not available, and also may be applied before a rain or irrigation, requiring no additional water be applied to the soil. 50 lbs. covers approximately 5000 sq. ft.

#### Water Soluble 15-2-20 (13% nitrate, 2% ammoniacal)

Mix this fertilizer in water before applying and apply as a DRENCH, not just a foliar spray. Do NOT APPLY DRY! When you open the outer bag, you will see 2 smaller bags inside - one bag contains blue material and the other contains white. When you mix the fertilizer in your tank, half of the weight you need should come from each bag. For example, if you are mixing 2 lbs. of fertilizer into 100 gallons of water, 1 lb. would come from the blue bag and 1 lb. would come from the white. It sounds a bit goofy but it has to do with chemistry and elements getting bound together if they stay in the same bag with each other and stuff like that. If you have to hold pansies at your shop - apply 2 lbs./100 gallons every week to ten days. In the landscape, particularly AFTER, not before, extended rains, OK to apply up to 3 lbs. /100 gallons every 3 weeks. If plants get into a hunger situation, OK to apply 4 lbs./100 gallons.