

Domestic Nitrate of Potash Now Available

With the completion of its Vicksburg, Mississippi, plant, Southwest Potash Corporation is now able to supply nitrate of potash at lower prices than those previously available to U.S. growers. This fertilizer grade chemical contains less than 1/2% chlorine and only traces of other impurities. It contains 13.8% nitrogen and 46.6% potash.

While potassium nitrate has not proven superior to other forms of potash for carnation growth in nutrient culture (CFGA Bulletin 153), it offers certain advantages over potassium chloride that are well worth the slight additional cost. Potassium nitrate is a nonresidue fertilizer. Both the potassium and nitrogen are used by plants, whereas residues of chlorides or sulphates remain in the soil from other common potash fertilizers. These residues contribute to a build-up of total soluble salts. If you have a chronic problem with high salts, the use of potassium nitrate will help to reduce it.

Nitrate of potash is readily soluble and its potash and nitrogen are immediately available to plants. Its total nutrient content of approximately 60% (K_2O and N) makes it one of the most highly concentrated fertilizer materials and reduces unit costs of transportation and handling. It is alkaline in reaction, hence should reduce the lime requirement.

On the cost side, nitrate of potash has recently been quoted in Colorado at \$169.00 per ton, about twice the cost of muriate of potash. The grower who feeds with ammonium nitrate and muriate of potash has approximately this cost per 100 sq. ft./yr.

9 pounds ammonium nitrate	-- 45¢
5 pounds muriate of potash	-- 20¢
	65¢

By changing to nitrate of potash he increases his cost 20 cents/100 sq. ft. as follows:

6 pounds ammonium nitrate	-- 30¢
6-1/2 pounds potassium nitrate	-- 55¢
	85¢

The use of ammonium nitrate and potassium nitrate pound for pound makes a balanced nutrient solution for carnations in Colorado. This solution would have near equal amounts of nitrogen and potash. To change from muriate of potash to potassium nitrate, use 30% more potassium nitrate. A slight reduction in the nitrate fertilizer will then be needed. Use the same weight of ammonium nitrate as potassium nitrate. If calcium nitrate is used, add twice as much as potassium nitrate.