Can we afford not to use Potassium Nitrate?

Muriate of potash has been the standard source for potassium in Colorado for several years. It is the cheapest source available in terms of price per pounds of potassium. The main drawback to muriate of potash is its chloride content. Chloride is not essential to the growth of common plants, but chloride accumulations in the soil can become toxic to plant growth. When chlorides are the principal cause of soil salinity a relatively low total soluble salt level causes stunting, hardening of plants and reduction in the quality of flowers. Petal-edge burning of carnations and reduced keeping life of the flowers are costly results from accumulations of chloride in soils.

Potassium nitrate, on the other hand, leaves no residue of unused ions in the soil. A combination of ammonium nitrate and potassium nitrate will supply the nitrogen and potassium needs of plants, and all of both compounds would be used or leached out.

Potassium nitrate is expensive in terms of price per pound of fertilizer ingredients. Potassium nitrate contains 14% nitrogen and 44% potassium. The nitrogen in a ton of potassium nitrate is worth about $36.40. Deducting this from the price of a ton ($190) we have a net cost of $153.60 for the 880 lbs. of potassium/ton of potassium nitrate. This amounts to 17½ cents per pound of potas-

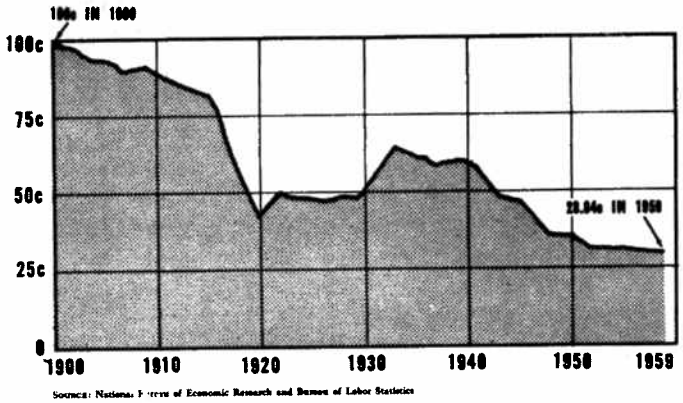
sium, compared to about 5 cents per pound when the potassium comes from muriate of potash.

Approximately four pounds of potassium (7 lbs. muriate of potash) are needed by a carnation crop per 100 sq. ft. per year. The cost of this four pounds would be 20 cents from muriate, and 70 cents if the potassium were taken from potassium nitrate. This is a difference of only 50 cents per 100 sq. ft. or ½ cent per square foot per year. It seems a pretty small amount to pay for insurance against some of the troubles which can arise from continued use of potassium chloride. Growers who have appreciable chlorides in their water supply cannot afford to take chances with muriate of potash. Perhaps none of us can afford to take this chance.

Your editor,

W D Holley

THE DECLINING VALUE OF THE DOLLAR



Source: National Bureau of Economic Research and Bureau of Labor Statistics

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OFFICE OF EDITOR
W. D. HOLLEY
Colorado State University
Fort Collins, Colorado

FIRST CLASS