

were reduced during dry periods, nitrapyrin had no significant effect on N<sub>2</sub>O evolution. It is apparent from these data that nitrapyrin effectively reduced N<sub>2</sub>O evolution with both N sources.

### Conclusions

Stabilization of N (100% NO<sub>3</sub><sup>-</sup>, combinations of NO<sub>3</sub><sup>-</sup> and NH<sub>4</sub><sup>+</sup>, and 100% NH<sub>4</sub><sup>+</sup>) due to incorporating nitrapyrin into the fertilizer band resulted in significant yield increases in both 1978 and 1979 under different environmental conditions. Yield increases were directly related to a reduction in denitrification by nitrapyrin as indicated by decreased N<sub>2</sub>O evolution and increased soil NO<sub>3</sub><sup>-</sup> levels and total plant-N.

Thus, these data suggest that denitrification is a significant factor influencing plant growth under normal cultural conditions regardless of the form of N employed. Secondly, nitrapyrin is an effective means of inhibiting denitrification in a Cecil clay loam soil with both NO<sub>3</sub><sup>-</sup>-N and NH<sub>4</sub><sup>+</sup>-N. The concentration of nitrapyrin required to inhibit denitrification does not exceed recommended rates (550g/ha) of application. However, it should be noted that nitrapyrin was concentrated in the N fertilizer band rather than broadcast as it is normally applied.

This is supported by additional studies in this laboratory (unpublished data) which indicates that broadcast applications of nitrapyrin may not be as effective as banded applications in inhibiting denitrification and the findings of Cribbs and Mills (1) in which an inhibition of denitrification due to the incorporation of nitrapyrin into the media was greater with the presence of a plant.

### Literature Cited

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### ERRATUM

In the paper, **Distribution of <sup>14</sup>C Photosynthetic Assimilates in 'Valencia' Orange Seedlings at 10° and 25°C** by C. L. Guy, G. Yelenosky, and H. C. Sweet (*J. Amer. Soc. Hort. Sci.* 106(4):433-437. 1981) the title for Table 1 should read: **<sup>14</sup>C-labeled fractions extracted from 'Valencia' orange seedlings exposed to <sup>14</sup>CO<sub>2</sub> (50 μCi for 3 hours) at 25° and 10°C and maintained at those temperatures for 28 days in controlled temperature light rooms.**

The title for Figure 2 should read: **Distribution of <sup>14</sup>C in amino acids, lipids, organic acids, proteins, starch and sugars in stems of orange seedlings conditioned at 25° and 10° C.**

The title for Figure 3 should read: **Distribution of <sup>14</sup>C in amino acids, lipids, organic acids, proteins, starch and sugars in roots of orange seedlings conditioned at 25° and 10° C.**

The title for Figure 4 should read: **Distribution of <sup>14</sup>C in leaves (●), stems (■), and roots (☆) of orange seedlings conditioned at 25° and 10° C.**