



TURFAXTM

of the International Sports Turf Institute, Inc.

The International Newsletter about Current Developments in Turfgrass
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CONTENTS:

- TurFax Expands.
- JB Comments: Allelopathy.
- JB Visitations.
- Upcoming JB Visitations.
- 3-Dimensional vs. 2-Dimensional Root Zones Stabilizers.
- Turfgrass Information Center.
- Enhancing Participant Safety On Natural Turfgrass Surfaces - Part II.

TURFAX EXPANDS

TurFax is now evolving to a new stage including expansion from 6 to 8 pages and an active marketing program to a wider readership. The production and marketing will be assumed by Ann Arbor Press. Dr. J.B Beard will continue to write a majority of the articles. The two page expansion will be represented by three new Contributing Authors: disease management by Dr. Peter Dernoeden, University of Maryland; insect management by Dr. Daniel Potter, University of Kentucky, and weed science-plant growth regulators by Dr. Fred Yelverton, North Carolina State University. Most of the TurFax format will remain the same, with a focus on short, concise topics featuring key trends, innovative new practices/products, and basic practices in turfgrass science and culture. ISTI Affiliates will continue to receive TurFax on a complimentary basis.

JB COMMENTS: ALLELOPATHY.

I received a recent letter indicating they had heard that Dr. Beard had demonstrated a toxic effect of perennial ryegrass (*Lolium perenne*) on other turfgrass species. This in fact is not the case!

The proper terminology for this negative effect is termed allelopathy, which is the influence of a living plant upon another due to the secretion of a toxic substance(s). The classic example is the adverse effect of walnut tree secretions on plants growing under the canopy and above the root system. To date there has been no research that demonstrates an allelopathy affect attributable to perennial ryegrass or any other turfgrass species under real-world turf conditions.

There are a number of experiments where the plant has been macerated and an extract collected that is used to conduct tests by attempting to germinate seeds or to grow plants on the extracted substance. In this case growth suppression may be demonstrated. However, by definition the key word is secretion, with the toxic compound retaining its integrity until it is taken up by the affected plant. In many cases the active microbiological population in the soil degrades the organic secretion before it reaches the adjacent plant. To summarize, it can not be stated absolutely that allelopathy does not occur among certain turfgrasses species. Rather there is no valid real-world research that has clearly demonstrated actual allelopathy secretions to be lethal among turfgrass species.