

(Turfgrass Research cont'd.)

that has "tremendous potential" once some of the problems are solved — namely, the difficulty the grass has of propagating from seed, and the fact that it's slow to grow and cover spots over. It also has difficulty in cold weather climates. On the bright side, the grass, which was brought here from Southeast Asia, has a low water/nitrogen requirement, and since it doesn't grow very fast, requires less maintenance.

Hurley explained another exciting discovery which could make a difference. "We've found a fungus which lives in the tissues of certain grasses that produces its own protection from insects," he remarked. "It produces an alkaloid toxic to insects. Now, can we develop a bentgrass variety for use in putting greens? That would be a significant discovery."

"There are direct applications of turfgrass research," Prusa stated, "that could have a direct bearing on agriculture's ability to improve on the production of food and fiber."

"There is a possibility that we can discover something that might go a long way toward feeding the world."

"Of course, there's never enough being done," Bengeyfield said. "We can always do more if it's properly coordinated and directed. You can give anyone money and they'll spend it on something. But will it be important?"

"We have to all work together and work toward positive answers that will be meaningful to the game of golf."

Credit: The Wedge, Jan./Feb., 1985

Effect of Nitrogen Fertilization on Earthworm and Microarthropod Populations in Kentucky Bluegrass Turf

**by D. A. Potter, B. L. Bridges and F. C. Gordon, 1985
Agronomy Journal, Vol. 77, Number 3, pages 367-372**

Turfgrass is a complex system consisting of the roots, stems and leaves of grass plants together with a tightly intermingled layer of dead and living roots, stems and organic debris commonly called thatch. This habitat supports a diverse assemblage of invertebrates, including earthworms, nematodes, millipedes, oribatid mites and collembola. These are important to plant litter decomposition. They aid in the decomposition process by fragmenting and conditioning plant debris before further breakdown by microorganisms. They also disseminate bacteria and fungi, enrich the soil with their excreta and help to pull down and mix organic matter into the soil. A Kenblue Kentucky bluegrass turf treated with varying rates of ammonium nitrate fertilizer was maintained for study. Increasing the rate of nitrogen fertilization produced a decline in soil and thatch pH and in exchangeable calcium and potassium and caused an increase in thatch development. A decrease in earthworm density and biomass was noted as annual fertilizer rates increased. Collembola were more abundant at an intermediate fertilizer rate. Acaridae were unaffected by nitrogen fertilization. Cryptostigmata were found to be the most abundant arthropod decomposers in the turf.

The Fate of Diazinon Applied to Thatched Turf

**by B. E. Branham and D. J. Wehner, 1985
Agronomy Journal, Vol. 77, No. 1, pages 101-104**

The plant-thatch-soil continuum has a major effect on the rate of dissipation of pesticides applied to turfgrass stands. Thatch is defined as a tightly intermingled layer of dead and living stems and roots that develop between the zone of green vegetation and the soil surface. In order to maximize the efficacy of pesticides aimed at controlling soil-borne insects, it is important to understand how soil properties and the presence of thatch affect the rate and avenues by which pesticide dissipation occurs. Diazinon is widely used to control turfgrass insect pests. A Kentucky bluegrass turf with and without thatch was used to study loss of Diazinon by volatilization, leaching and degradation. Only seven percent of the Diazinon remained after three weeks. Between thirty-two and forty-seven percent remained in either turf with thatch irrigated every four days or in turf without thatch. Most of the Diazinon (96 percent) remained in the top 10 millimeters (0.4 inch) of the turf profile regardless of whether this was thatch or soil. Where thatch is present, reduced control of insects is due to both a failure of the insecticide to move through the thatch and an increased rate of degradation.

In Your Garden

For the Spice of Your Life

by James A. Fizzell

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Want to add a little spice to your life? Want to add a little flavor to things? Then, try a window-sill herb garden. Salads, soups, stews, and sauces can all be spiced up with herbs grown on your window sill. In addition, many herbs make nice foliage plants as well.

For the beginner, start with easily grown types such as parsley, chives, and sweet marjoram for mild tastes; and rosemary, sage and thyme for the strong pungent taste.

Parsley makes a nice garnish for salads, soups, stews, potatoes and meats. Chives are good for soups, salads and homemade potato chip dips.

Rosemary is good in both sprig and leaf form. It is used with meats, sauces and soups. A prime flavor in turkey stuffings is sage. It also goes well with pork chops. Finally, thyme, the last member of the beginner window sill garden, goes well in soups, omelets and gravy.

To grow herbs, get good quality seed. Plant in seed flats and transplant; or, plant directly into pots and thin out excess seedlings as needed. Keep soil moist but not wet, cautions Fizzell.

Once the herbs are growing, they will do best in a sunny south window, with 65-72°F. temperatures, and a soil allowed to dry slightly between waterings. Fertilize about every six weeks with a weak, water soluble fertilizer solution. Harvest the herbs at periodic intervals to keep the plants healthy. Harvest the older leaves first.

Growing your own herbs can be very rewarding, producing attractive foliage plants, and adding flavor to your food and spice to your life.