## Families of Fungicides for Turfgrass

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## **Chemical Family: Dithiocarbamates**

**Common Name:** 

Maneb

Zineb Mancozeb

Thiram

Chemical Family: Dicarboximides

**Iprodione** 

Vinclozolin

Trade Names:(+)

Dithane FZ, Dithane M-22

Dithane Z-78, Zineb Fore, Formec, Lesco 4, Dithane M-45, Protect T/O

Spotrete

Chipco 26019, Proturf Fungicide VI

Vorlan, Touche', Curalan

Comments:

These types of fungicides have broad spectrum control properties and are used as protectants.

These fungicides were developed in the mid-1970s and are locally systemic in nature. These fungicides are considered to have a broad spectrum of control. Fungal resistance has been reported for this group.

## **Chemical Family: Benzimidazoles**

Benomyl

Thiophanite-methyl

Rockland, Lebanon Fungicide Type B

Fungo 50, Cleary's 3336

Benomyl became available in the late 1960s. These fungicides are characterized by acropetal (upward) transport and have had reported cases of fungal resistance.

## **Chemical Family: Sterol Inhibitors**

Fenarimol

Triademefon

Propiconazole

Cyproconazole

Additional Fungicides. . . . in different chemical families

Anilazine

Chlorothalonil

Flutolanil

PCNB

(pentachloronitrobenzine)

Pythium Controlling Fungicides. . . in different chemical families Metalaxyl

Propamocarb

Fosetyl Aluminum

Cholorneb

Etridiazol

Bayleton

Banner

Sentinel

Dyrene, Lescorene, Lofts Lawn

Fungicide

Daconil 2787, Lebanon Type Fungicide D

ProStar

Terraclor, Turfcide, Scotts. FFII, PCNB Resistance has not been reported with

Subdue, Proturf Pythium Control Banol

Aliette

Teremec SP, Proturf Fungicide II

Koban, Terrazole

This group of fungicides is the newest chemistry to be developed. The group has a broad spectrum control range and is acropetal (upward) systemic. At times, also referred to as DMI's (demethylationinhibitors)

Listed below are important fungicides that give generally broad spectrum control. Since these compounds represents different chemical groups, they are bunched together here. They are protectant type fungicides that do not have systemic activity (however) PCNB may be locally systemic).

these protectants.

Few diseases, if any, besides the pythium fungi or closely related fungi (water molds phycomycetes like yellow tuft), are controlled. Tersan SP and Koban are effective for only a few days. Subdue and Banol have up to 4 weeks of control (2-3 weeks more reliable). Aliette is an interesting compound since it did not originally appear to have fungicidal activity, but conveys greater host resistance and a true systemic movement both up and down the plant.

**GOLF COURSE NEWS** 

<sup>\*</sup>Adapted from: Turfgrass Ecology and Management by T.K. Danneberger

<sup>+</sup>Product list by Trade Name may not be all inclusive