

# Southern California Turfgrass Culture

A Quarterly Publication devoted to the activities of the Experimental Program in Turfgrass Culture  
of the College of Agriculture, University of California, Los Angeles 24, California.

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VOLUME 5 · NUMBER 2

## TURF FUNGICIDE TRIALS - 1954

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The 1954 turf fungicide trials were conducted on an area of Seaside creeping bent turf, fertilized at monthly intervals with Milorganite at the rate of 15 pounds of nitrogen per 1000 square feet per year. The area was mowed three times a week at 1/4 inch. Ten fungicidal formulations supplied by the manufacturers were each applied to 4 randomized 25 square foot test plots at 14-day intervals from July 21 to October 6. A six-gallon electric powered sprayer operating at 40 pounds pressure, with a single flat jet spray nozzle was used to apply the sprays at the rate of 5 gallons per 1000 square feet of turf area. Due to a mechanical breakdown of the sprayer on August 4, only the Mercadmine, Liquiphene and Calo-Clor plots were treated at that time.

The fungicides tested and the manufacturers were:  
Actidione ferrated ..... Upjohn Company  
Actidione-endomycin and bulking and wetting agents ....  
..... Upjohn Company  
Actidione and bulking and wetting agents .....  
..... Upjohn Company  
Calo-Clor ..... Mallinckrodt Chemical Works  
Copper dihydrazinium sulfate (446-50% wettable) .....  
..... Mathieson Chemical Corporation  
Liquiphene ..... Vineland Chemical Company  
Mercadmine ..... H. L. Woodhuysen & Associates  
PMAS ..... W. A. Cleary Corporation

The results are given in the following table:

**DOLLAR SPOT CONTROL**

FUNGICIDE	DOSAGE PER 1000 Sq. Ft. 5 GALLONS WATER	AVERAGE NO. DOLLAR SPOTS PER 25 Sq. Ft.						
		7-21	8-4	8-13	8-25	9-8	9-22	10-1
Mercadmine	.1 pint	0	*1	0	0	0	8	7
Liquiphene PMA 33-1/3%	11.8 ml.	1	*0	0	0	0	0	0
Calo-Clor	2.0 oz.	0	*2	4	1	1	1	0
Actidione-27A (bulking and wetting agent)	13.0 gms.	1	1	2	2	2	13	8
Actidione-27B (endomycin and bulking and wetting agent)	13.4 gms.	0	0	3	2	0	14	14
Cudihydrazinium sulfate (50% wettable)	22.6 gms.	2	6	14	16	8	48	58
Actidione-27C (bulking and wetting agent)	13.0 gms.	4	0	8	1	4	33	42
Actidione-27D (endomycin and bulking and wetting agent)	13.4 gms.	1	0	2	0	0	16	17
Actidione (ferrated)	.5 oz.	4	0	7	0	0	0	0
PMAS	.1 pint	2	0	3	1	0	0	0
Control		1	5	12	14	8	52	54

\*Only plots sprayed 8-4.

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This publication "Southern California Turfgross Culture" is sponsored and financed by the Research Advisory Committee. Communications should be sent to the Secretary, or to Dr. V. T. Stoutemyer, Department of Floriculture and Ornamental Horticulture University of California, 405 Hilgard Avenue, Los Angeles 24, California.

## DR. YOUNGNER JOINS STAFF

Dr. Victor B. Youngner recently joined the staff of the Department of Floriculture and Ornamental Horticulture at U.C.L.A., where he will conduct a program of research in turfgrass management and breeding. Dr. Youngner received his doctoral degree at the University of Minnesota. His training was in the fields of genetics, plant breeding, horticulture and agronomy. During the past three years he was with the Ferry-Morse Seed Company at Salinas, California. Dr. Youngner is married and has two children.

This addition to the staff of the Department is another landmark in the acceleration of research in this field. We are also pleased to note elsewhere in this issue the first establishment of extension work in this field, in Los Angeles County.



DR. VICTOR B. YOUNGNER

A copy of "The Groundsman" - a 40-page magazine devoted to the affairs of the National Association of Groundsmen in England, passed over our desk recently. This organization has about 2500 members and celebrated its 21st birthday in January 1955. Annual dues are one pound per year, which is currently \$2.80. The Hon. General Secretary is Mr. A. McTaggart, 4 Hill Road, Wimbledon S.W. 19, England.

# MICROLAENA STIPOIDES CR. Br.

by

Louis B. Hortin and R. J. Seibert

One of seven species within the genus, *Microlaena stipoides* is used for pasture and lawns in its native habitat of New Zealand and Australia. To the author's knowledge, it has not been used as a turfgrass in the United States. The Plant Introduction Section of the USDA has introduced this grass several times during the past 30 years; however, they have no data as to its performance. The available literature does report taxonomic aspects of *Microlaena*, but no horticultural information is included.

From the Manual of New Zealand Flora, T. F. Cheeseman, we learn that *M. stipoides* is a slender perennial, has creeping rhizomes, culms are numerous from the rhizome, and the plant has the aspect of being erect or somewhat spreading. The leaves are short, broad, thin, flat, and pointed. The flowering stalk varies from 3-9 inches and is more or less erect. The panicle (seed head) is lax or drooping and the glumes bear long awns. F. Manson Bailey, The Queensland Flora, calls this grass 'Meadow Rice Grass'. Further, in his Comprehensive Catalogue of Queensland Plants, he states that this grass will thrive in shade of trees. J.W. Audas, The Australian Bushland, calls *Microlaena* species 'weeping grass' and lists them among grasses suitable for moist soils.

Recently, the Los Angeles State & County Arboretum has added *M. stipoides* to its grass collection for observation and testing as a turfgrass for the Southern California area.

Our first plot was started in September '53, using seed obtained from Duncan & Davies Ltd., New Zealand. Germination was excellent and the resulting stand was dense and the grass was of a rich green color. Individual plants were moved to a permanent site in May, '54, and during the summer these plants increased in width and height. Two substantial seed crops were harvested, one in mid-summer and the other in Sept. After the latter, the plot was covered with redwood shavings and kept moist for a time. Fairly good germination resulted from fallen seed, the new plants filling in the spaces between the parent material. The grass was mowed for the first time, at a height of 3 inches, in late September.

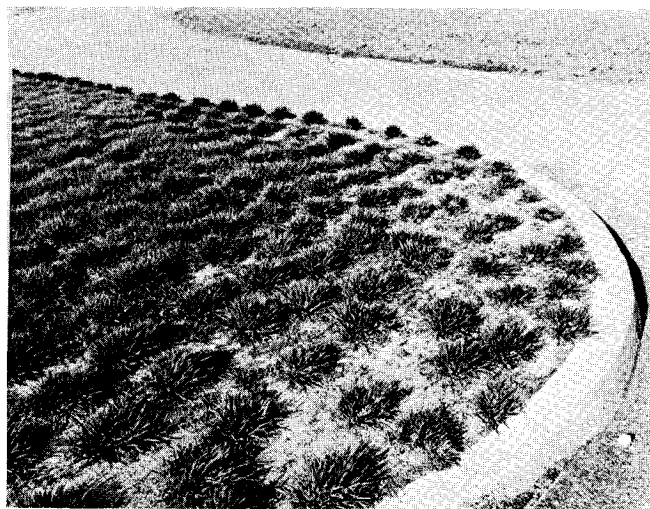
It was observed with considerable interest, that some of the grass at the original seeding site remained green during the summer, although no water was applied following the removal of the vegetative material.

Our observations are indeed too few and cover too short a time to draw any conclusions as to the ultimate value of *M. stipoides* as a turfgrass. Its observed performance includes the following which might be considered as desirable qualities for any turfgrass in this area: 1) successful establishment from seed or vegetative material, 2) abundant viable seed production,

3) satisfactory growth in heavy soil, 4) an appealing green color, 5) demonstrated tolerance to drought; and from the literature: 6) recommended for moist soils; however, this may only apply when accompanied by certain other environmental factors, and 7) will grow in the shade of trees; again, this may be too general a statement.

Critical turfgrass data still in question are: 1) the resistance to disease and insect attack, 2) the fertilizer requirements, 3) the water requirements, 4) the "brown-off" temperature, 5) the optimum cutting height, 6) the tolerance to traffic, 7) the turf 'quality' once a solid lawn is formed and under daily use for a period of years.

A small quantity of the '54 seed was given to Dr. Stoutemyer for testing at UCLA. If there is sufficient seed in '55, the Arboretum will, on request, distribute seed to encourage a more general inquiry into the turfgrass potentials of *M. stipoides*.



PLOT OF MICROLAENA IN DECEMBER,  
SHOWING RETENTION OF GREEN COLOR

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## MERION BLUEGRASS SEED PRODUCTION

A twelve page mimeographed circular with the title listed above has been published by the Department of Agronomy, College of Agriculture, University of California. The authors are D. C. Sumner, D. S. Mikkelsen, and Robert M.

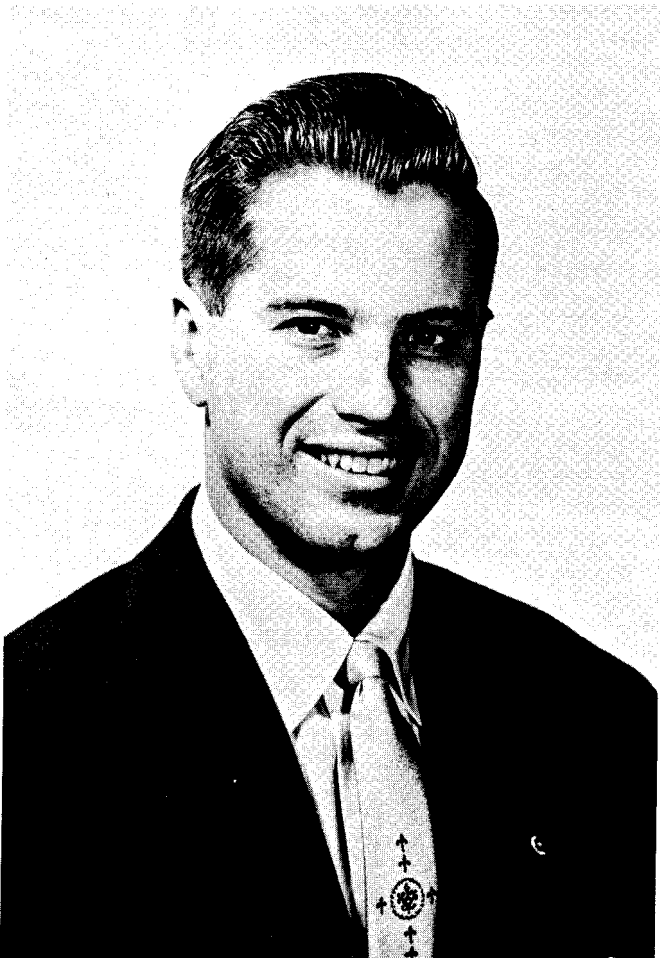
now Chairman of the Department of Irrigation and Soils. This publication is a progress report on studies on seed production methods on that campus. Frequent trouble with late frosts in the Pacific Northwest has stimulated the search for suitable growing areas in California.

# JOHN STARK APPOINTED FARM ADVISOR

John Stark has been appointed University of California farm advisor in Los Angeles County to work with the turfgrass industry. This announcement was made by Kenneth M. Smoyer, county director of farm and home advisors of Los Angeles County.

Stark recently received his B.S. degree in ornamental horticulture from U.C.L.A. While at U.C.L.A., he received an award as the most outstanding senior in the Department of Floriculture and Ornamental Horticulture. Stark was active in student affairs, being president of the Agriculture Club and a member of Alpha Zeta, honorary fraternity for agricultural students. He is married and has a daughter one and one-half years old. He was a captain in the Marine Corps and saw action in Korea. Mr. Stark was manager of a West Los Angeles nursery, and while at U.C.L.A., he worked part-time as an assistant in the Department of Floriculture and Ornamental Horticulture.

John Stark will fill the position for which the turfgrass industry of Los Angeles County petitioned the County Board of Supervisors last year. Stark will be available to make field calls to all Los Angeles County turfgrass growers to help them with the various phases and problems of turfgrass growing. He can be reached by calling Mutual 3383 or writing John Stark, Room 800, 808 North Spring Street, Los Angeles 12.



JOHN J. STARK

Copper dihydrazinium sulfate gave no control of dollar spot.

Actidione formulations with bulking and wetting agents and with endomycin added did not give as good control of dollar spot as did the ferrated Actidione.

Effective control was obtained with the fungicides containing mercury. The phenyl mercury sprays, PMAS and Liquiphene, caused some leaf injury following the first application. On July 26 the injury on the plots sprayed with PMAS was recorded as severe. Injury on the plots treated with Liquiphene was noted as slight at that time.

(In order that the information in our publications may be intelligible, it is sometimes necessary to use trade names of products or equipment rather than complicated descriptive or chemical identifications. In so doing, it is unavoidable that similar products which are on the market under other trade names may not be cited. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.)

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## RECENT GIFT

California Spray Chemical Co.  
Richmond, California

300 pounds of pelleted commercial  
fertilizers

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## MONTHLY EVENING MEETINGS OF THE ADVISORY COMMITTEE

The monthly evening dinner meetings of the Advisory Committee continue to be well attended and interesting. Most of these are sponsored by the various cooperating organizations, and consequently different meeting places will be used. All meetings are open to the public, but those who wish to participate in the dinner must make advance reservations. The following is the tentative schedule for the remainder of the year:

- April 18** - Implement Dealers, Seed Dealers, Interment Association of California
- May 16** - Southern California Chapter of American Society of Landscape Architects.
- June 20** - California Association of Nurserymen
- July** - No meeting
- August** - No meeting
- September 19** - Los Angeles City Department of Recreation and Parks, and American Lawn Bowling Association
- November 21** - Los Angeles City Schools
- December** - No meeting