

9705723-6

1905

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : A01N		A2	(11) International Publication Number: WO 96/32011
			(43) International Publication Date: 17 October 1996 (17.10.96)
(21) International Application Number: PCT/US96/04488 (22) International Filing Date: 1 April 1996 (01.04.96) (30) Priority Data: Not furnished 3 April 1995 (03.04.95) US (60) Parent Application or Grant (63) Related by Continuation US Not furnished (CON) Filed on 3 April 1995 (03.04.95)		(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>	
(71) Applicant (for all designated States except US): NORTH CAROLINA STATE UNIVERSITY [US/US]; 103 Holladay Hall, Campus Box 7003, Raleigh, NC 27695-7003 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): LUCAS, Leon, T. [US/US]; 3804 Victorian Grace Lane, Apex, NC 27602 (US). (74) Agents: PARK, Charles, B., III et al.; Bell, Seltzer, Park & Gibson, P.O. Drawer 34009, Charlotte, NC 28234 (US).			
(54) Title: FUNGICIDAL COMPOSITIONS FOR THE ENHANCEMENT OF TURF QUALITY			
(57) Abstract			
Fungicidal compositions for the protection of turfgrass against crown and root rot are disclosed. The compositions comprise, as the active material, (a) a monoester salt of a phosphorous acid (preferably aluminum ethyl phosphite), (b) an ethylene bisdithiocarbamate contact fungicide (preferably manganese-zinc ethylene bisdithiocarbamate), and (c) a benzoporphyrin compound. Preferred compositions comprise 1 part by weight of the monoester salt, 2 parts by weight of the ethylene bisdithiocarbamate, and between about 0.01 and about 0.1 parts by weight of the benzoporphyrin compound.			