UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
TECHNOLOGY DEVELOPMENT AND APPLICATION, ECOLOGICAL SCIENCES
WASHINGTON, D. C.

and the

TEXAS FOREST SERVICE
TEXAS A&M UNIVERSITY
COLLEGE STATION, TEXAS

and the

TEXAS PARKS AND WILDLIFE DEPARTMENT
AUSTIN, TEXAS

NOTICE OF RELEASE OF 'BOOMER' BUR OAK

The United States Department of Agriculture, Soil Conservation Service, the Texas Forest Service, and the Texas Parks and Wildlife Department announce the naming and release of 'Boomer' bur oak *Quercus macrocarpa* Michx.. 'Boomer' was developed at the Soil Conservation Service Plant Materials Center, Knox City, Texas. The permanent number assigned to 'Boomer' bur oak is PI-566824.

Bur oak is a tall, long-lived, deciduous hardwood tree native to the Great Plains from southern Texas up through and into Canada. 'Boomer' was originally collected from native stands in Custer County, Oklahoma. Selected from seven collections evaluated in a series of long term growth trials, 'Boomer' consistently outperformed the others in overall growth and habit. Field studies at three sites have proven that this selection is well adapted for windbreak use on the Southern High Plains and Rolling Plains of Oklahoma and Texas. It is adapted to a wide range of soil types and will perform well in dry areas when provided supplemental irrigation.

The heavy spreading branches, large dense leaves, and large acorns make 'Boomer' attractive to wildlife by providing shelter and food. ' Boomer' bur oak will make an attractive landscape plant for urban and recreation areas by providing dense shade.

Seed orchards will be maintained at the Knox City Plant Materials Center and at other field trial sites. Seedlings will be available through the Plant Materials Center and through the Texas Forest Service, Windbreak Tree Program, Lubbock, Texas.

'Boomer' Bur Oak Release Information

Scientific name: *Quercus macrocarpa* 'Boomer'

Common name: 'Boomer' bur oak

Origin: Custer County, Oklahoma, collected in 1972, along Boomer Creek near Clinton, Oklahoma, collected by J.F. Sykora, PI-566824, evaluated as 9022859, original accession number PMT - 3061.

Hardiness zone: Zone 5, range of species is Zone 3-9.

Method of development: Direct increase of trees produced from original collection seed; planted and evaluated in three conservation field trials in northwest Texas; compared with six other collections from Texas and Oklahoma; selected for rate of growth, upright growth habit and it's ability to perform in dry areas with supplemental irrigation for establishment. Since initial planting in 1983, PI-566824 has consistantly outperformed others in growth rate and habit under windbreak field conditions at three field trial sites.

Mean growth rates in a series of long term growth trials.

	Accession *a.						
Year	1	2	3	4	5	6	7
83	38*b.	29	33	34	21	32	36
84	76	45	55	59	28	61	49
85	115	75	83	95	64	94	94
86	170	117	133	144	115	142	130
87	230	168	199	186	156	185	180
88	275	184	241	247	173	241	223
89	304	213	247	283	196	279	258
90	326	225	274	307	196	300	286
91	358	257	302	321	239	338	316

*a. 1-566824, 2-9004392, 3-9035039, 4-9011312, 5-9029511, 6-9029515, 7-9029517

*b. Mean average of three sites - Knox City, Levelland, Pampa

Habit and growth rate: Moderate growth up to 60 feet. Long lived.

Ornamental features: Heavy spreading branches with conspicuous corky ridges after second year. The bark is light gray. Deciduous leaves are dark green with grayish green undersides, dense, large ranging in size from 6-12 inches long and 3-6 inches wide. The acorn is set deeply in a fringed cup and may vary in diameter from 1-2 inches. Acorns mature in one season.

Culture: Grows well in most soils. Likes rich moist soils along streams. Performs exceptionally well in windbreaks with supplemental irrigation.

Pest/disease problems: None observed, except animals will utilize acorns for food which may pose a problem if acorns are being collected for production.

Landscape value: Developed for windbreak plantings on the High Plains and Rolling Plains of Texas and Oklahoma. Attractive to wildlife. Potential landscape plant for urban and recreation areas providing dense shade.

Propagation: Acorns may be seeded into raised beds in the fall or spring plant after 60 days of cold damp stratification. Protect field plantings from rodents.

Breeder seed: Seed orchards maintained at the USDA-SCS Plant Materials Center, Knox City, Texas, and at three field trial sites. No patents or trademarks apply.

Commercial Sources: Limited nursery tree stock available through the Knox City Plant Materials Center and through the Texas Forest Service, Windbreak Tree Program, Lubbock, Texas

State Conservationist
Soil Conservation Service, Texas

Date

Director, Ecological Sciences
Technology Development and Application
Soil Conservation Service, Washington, D.C.

Date

Director
Texas Forest Service
College Station, Texas

Date

Director
Texas Parks And Wildlife Department
Austin, Texas

Date