

TABLE 7.—Recommended tree and shrub species, their arrangement in shelterbelts, and their adaptation to soils

TEXAS AND OKLAHOMA

Group and species	Sequence of rows <sup>1</sup>	Approximate height and position in shelterbelt									Adaptation to soil classes <sup>2</sup>							Remarks	
		Under 15 feet	10-25 feet	20-40 feet	30-50 feet	Over 50 feet	30-50 feet	20-40 feet	10-25 feet	Under 15 feet	Uplands			Terraces			Low wet soils		
											Sands <sup>3</sup>	Sandy loams <sup>4</sup>	Fine-textured soils <sup>5</sup>	Sands <sup>3</sup>	Sandy loams <sup>4</sup>	Fine-textured soils <sup>5</sup>			
<b>Hardwoods:</b>																			
Cottonwood ( <i>Populus sp.</i> ).....	1					X					Fa	Fa	—	F	G	G+	G	a Use 3 rows throughout Oklahoma part of shelterbelt zone.	
Sycamore ( <i>Plantanus occidentalis L.</i> ).....	2				X						—	F	F	F	F+	F+	F+	Subject to cotton-rot rot infection.	
Dwarf Asiatic elm ( <i>Ulmus pumila L.</i> ).....	3				X						F	G	G	G	G	G	E		
Honeylocust ( <i>Gleditsia triacanthos L.</i> ).....	4				X						E	G	G	F+	G	G	G		
American elm ( <i>Ulmus americana L.</i> ).....	5				X						E	F+	F+	F+	F+	F+	F+		
Russian mulberry ( <i>Morus alba tatarica (L.) Loud.</i> ).....	6				X						F	G	G	F+	G	G	F		
Paloblanco ( <i>Celtis reticulata Torr.</i> ).....	7				X						G	G	G	G	G	G	G		
Osage-orange ( <i>Tozylon pomiferum Raf.</i> ).....	8				X						F-	a	F+	F+	G	G	E		
Black locust ( <i>Robinia pseudoacacia L.</i> ).....	9			X						X	a	a	—	F+	G	F	F	a Can be used on uplands if water table is within 15 feet. Borer damage very prevalent.	
Hardy catalpa ( <i>Catalpa speciosa Warder</i> ).....	10			X						X	—	—	—	E	F+	F+	G		
Chinese elm ( <i>Ulmus parvifolia Jacq.</i> ).....	11			X						X	G	G	G	G	G	G	E		
Black walnut ( <i>Juglans nigra L.</i> ).....	12			X						X	—	F	F	—	F+	F+	E		
Little walnut ( <i>Juglans rupestris Engelm.</i> ).....	13			X						X	—	F	F	—	F+	F+	E		
Green ash ( <i>Frazinus pennsylvanica lanceolata (Borkh.) Sarg.</i> ).....	14			X						X	—	F+	F	—	F+	F+	F+		
Ailanthus ( <i>Ailanthus altissima (Mill.) Swingle</i> ).....	15			X						X	E	F	E	F	F+	F+	E	Suckering sometimes objectionable.	
Coffeetree ( <i>Gymnocladus dioica (L.) Koch</i> ).....	16			X						X	—	—	—	—	F+	F+	E		
Pecan ( <i>Hicoria pecan (Marsh.) Britt.</i> ).....	17			X						X	—	E	E	—	E	E	E		
Post oak ( <i>Quercus stellata Wang.</i> ).....	18			X						X	E	E	E	E	E	E	E		
<b>Conifers:</b>																			
Austrian pine ( <i>Pinus nigra austriaca Schneid.</i> ).....	19			X						X	E	E	E	E	E	E	E		
Ponderosa pine ( <i>Pinus ponderosa Laws.</i> ).....	20			X						X	F	F+	F	F+	F+	F	—	Ordinarily use not over 1 row.	
Scotch pine ( <i>Pinus sylvestris L.</i> ).....	21			X						X	E	E	E	E	E	E	E		
Arizona cypress ( <i>Cupressus arizonica Greene</i> ).....	22			X						X	E	G	G	E	G	G	E		
Eastern red cedar ( <i>Juniperus virginiana L.</i> ).....	23			X						X	G	G	G	G	G	G	E		
Rocky Mountain red cedar ( <i>Juniperus scopulorum Sarg.</i> ).....	24			X						X	G	G	G	G	G	G	E		
One-seed juniper ( <i>Juniperus monosperma (Engelm.) Sarg.</i> ).....	25			X						X	F+	G	G	F+	G	G	E		
Redberry juniper ( <i>Juniperus pinchotii Sudw.</i> ).....	26			X						X	G	G	G	G	G	G	E		
Oriental arborvitae ( <i>Thuja orientalis L.</i> ).....	27		X							X	E	F	F	E	F	F	E		
<b>Tall shrubs:</b>																			
Apricot ( <i>Prunus sp.</i> ).....	28		X							X	E	G	G	E	G	G	E		
Redbud ( <i>Cercis canadensis L.</i> ).....	29		X							X	E	F+	F	F	G	G	E		
Western soapberry ( <i>Sapindus drummondii H. and A.</i> ).....	30		X							X	G	G	F+	G	G	G	G		
Gum elastic ( <i>Bumelia lanuginosa (Michx.) Pers.</i> ).....	31		X							X	—	—	—	F	F	F	E		
Texas pistache ( <i>Pistacia texana Swingle</i> ).....	32		X							X	E	E	E	E	E	E	E		
Russian-olive ( <i>Elaeagnus angustifolia L.</i> ).....	33		X							X	F+	G	G	G	G	G	G		
Roughleaf dogwood ( <i>Cornus asperifolia Michx.</i> ).....	34		X							X	E	E	E	F+	F+	F+	E		
<b>Low shrubs:</b>																			
Desertwillow ( <i>Chilopsis linearis (Cavanilles de Candolle)</i> ).....	35	X								X	E	G	G	E	G	G	—		
Tamarisk ( <i>Tamarix gallica L.</i> ).....	36	X								X	G	G	G	G	G	G	G		
Lilac ( <i>Syringa sp.</i> ).....	37	X								X	F+	G	G	G	G	G	E		
Hawthorn ( <i>Crataegus sp.</i> ).....	38	X								X	E	E	E	E	E	E	E		
Chickasaw plum ( <i>Prunus angustifolia Marsh.</i> ).....	39	X								X	F-	F	F	F+	F+	F+	E		
Sumac ( <i>Rhus sp.</i> ).....	40	X								X	E	F	F-	G-	G+	F+	E		
Coralberry ( <i>Symphoricarpos orbiculatus Muench.</i> ).....	41	X								X	—	E	E	E	F+	F+	E		

North or east Orientation South or west

<sup>1</sup> From center line of shelterbelt outward, any species having a larger number in this column will be planted in 1 or more rows outside the row or rows of any species having a smaller number. Ordinarily 1 or more species will be selected from each of the 4 groups indicated in the first column.

<sup>2</sup> Meaning of symbols: G, good adaptation to soil indicated; F, fair; E, for experimental use in very small amount; —, poor, do not use; + or —, somewhat better or poorer than letter rating. Small letters refer to remarks in same line in last column. It is assumed that the following soils will be avoided, except experimentally: Coarse gravel soils, undrained basins (buffalo wallows), shale-derived clays, alkaline basins, claypan soils.

<sup>3</sup> Includes sands, loamy sands, and loamy fine sands.

<sup>4</sup> Includes sandy loams and fine sandy loams.

<sup>5</sup> Includes all soils of finer texture than the above; i. e., very fine sandy loams, loams, silt loams, silty clay loams, clay loams, clays.