Turfgrass Anatomy – Identifying Characteristics of the Different Turfgrasses

Cool Season Turfgrasses

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grass Species | Growth Habit | Vernation | Ligule | Auricles | Collar | Texture | Leaf Characteristics | Leaf Tip | Additional Characteristics |
| Creeping bentgrass | Stoloniferous | Rolled | Medium, membranous, rounded | Absent | Narrow to medium | Fine | Adaxial – ridged  Abaxial – smooth | Pointed |  |
| Colonial bentgrass | Bunch-type or rhizomatous | Rolled | Short, membranous | Absent | Narrow, oblique | Fine | Adaxial – ridged  Abaxial – smooth | Pointed |  |
| Velvet bentgrass | Stoloniferous | Rolled | Membranous, pointed, very long | Absent | Broad | Very fine | Adaxial – ridged  Abaxial – smooth | Pointed |  |
| Creeping red fescue | Rhizomatous | Folded | Membranous, short | Absent | Narrow, continuous | Very fine | Adaxial – ridged  Abaxial – smooth | Pointed |  |
| Chewings fescue | Bunch-type | Folded | Membranous, short | Absent | Narrow, continuous | Very fine | Adaxial – ridged  Abaxial – smooth | Pointed |  |
| Hard fescue | Bunch-type | Folded | Membranous, short | Absent | Broad, divided | Very fine | Adaxial – ridged  Abaxial – smooth | Pointed |  |
| Sheeps fescue |  |  |  |  |  |  |  |  |  |
| Tall fescue | Bunch-type | Rolled | Short, membranous | Short, blunt | Broad, divided | Medium or coarse | Adaxial – ridged  Abaxial – smooth | Pointed |  |
| Annual ryegrass | Bunch-type | Rolled | Membranous, medium, rounded | Pointed, clawlike, long | Broad, continuous | Medium | Adaxial – ridged  Abaxial – smooth, glossy | Pointed |  |
| Perennial ryegrass | Bunch-type | Folded | Membranous, medium | Clawlike, short | Broad, divided | Medium fine | Adaxial – ridged  Abaxial – smooth, glossy | Pointed |  |
| Kentucky bluegrass | Rhizomatous | Folded | Membranous, very short | Absent | Broad, divided | Medium fine | Adaxial – smooth  Abaxial – smooth | Boat-shaped |  |
| Annual bluegrass | Bunch-type or stoloniferous | Folded | Membranous, long, pointed | Absent | Broad, divided | Fine to medium | Adaxial – smooth  Abaxial – smooth | Boat-shaped |  |
| Rough bluegrass | Stoloniferous | Folded | Membranous, long, pointed | Absent | Broad, divided | Medium fine | Adaxial – smooth  Abaxial – smooth, glossy | Boat-shaped |  |

Warm Season Turfgrasses

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Grass | Growth habit | Vernation | Ligule | Auricles | Collar | Texture | Leaf Surface | Leaf Tip | Additional Characteristics |
| Bermudagrass | Stoloniferous and rhizomatous | Folded | Fringe of hairs, short | Absent | Narrow, continuous, long hairs on margin | Medium fine | Adaxial – smooth or hairy  Abaxial – smooth or hairy | Pointed |  |
| Zoysiagrass | Stoloniferous and rhizomatous | Rolled | Fringe of hairs, very short | Absent | Broad, continuous, long hairs on margins | Medium | Adaxial – smooth with long hairs  Abaxial – usually hairless | Pointed |  |
| Buffalograss | Stoloniferous | Rolled | Fringe of hairs | Absent | Broad, continuous, long hairs | Fine | Adaxial – ridged with long hairs  Abaxial – long hairs along surface, smooth | Pointed |  |
| Centipedegrass | Stoloniferous | Folded | Membranous, short hairs at top | Absent | Broad, continuous, constricted | Coarse | Adaxial – smooth  Abaxial – smooth | Pointed |  |
| St. Augustinegrass | Stoloniferous | Folded | Fringe of hairs | Absent | Broad continuous, constricted | Very coarse | Adaxial – smooth  Abaxial – smooth | Rounded |  |
| Bahiagrass | Rhizomatous | Rolled | Membranous, short | Absent | Broad | Medium coarse | Adaxial – sparse hairs along margin toward base, smooth  Abaxial – sparse hairs along margin toward base, smooth | pointed |  |

Turfgrass Identification Worksheet

Name:

|  |  |
| --- | --- |
| Turfgrass Anatomy | Sample |
| Growth Habit |  |
| Vernation |  |
| Ligule |  |
| Collar |  |
| Auricles |  |
| Leaf tip |  |
| Leaf surface – adaxial |  |
| Leaf surface – abaxial |  |
| Inflorescence |  |
| Turfgrass Species Name |  |