NATIONAL TURFGRASS EVALUATION PROGRAM

The National Turfgrass Evaluation Program (NTEP) is designed to develop and coordinate uniform evaluation trials of turfgrass varieties and promising selections in the United States and Canada. Test results can be used by national companies and plant breeders to determine the broad picture of the adaptation of a cultivar. Results can also be used to determine if a cultivar is well adapted to a local area or level of turf maintenance.

Briefly, the NTEP is a self-supporting, non-profit program, sponsored by the Beltsville Agricultural Research Center and the National Turfgrass Federation, Inc. Program policy is made by a policy committee consisting of one member from each of the four (4) Regional Turfgrass Research Committees in the United States, one member from the Lawn Seed Division of the American Seed Trade Association, one member from the United States Golf Association (USGA) Green Section, one member from the Golf Course Superintendents Assoc. of America (GCSAA), one member for the Turfgrass Producers International (TPI), one member from the Turfgrass Breeders Association, one member from the Sports Turf Managers Association of America (STMA), and an executive director. The program does not make variety recommendations. However, the data from tests can be used by extension specialists and others for making recommendations.

The policy committee is responsible for determining program policy including, (1) requirements for submission of entries, (2) scheduling tests, (3) evaluation methods, (4) selecting standard or control test entries, (5) setting entry fees, (6) coordinating tests in their respective regions, (7) establishing guidelines for publication and data distribution and (8) scheduling committee meetings.

Executive Director - Kevin N. Morris, National Turfgrass Evaluation Program, Inc.

CURRENT POLICY COMMITTEE MEMBERS:

Mr. Sean Chaney, DLF North America
Mr. Bo Lacy, Barenbrug USA.
Dr. Cole Thompson, USGA Green Section
Dr. Barry Stewart, Mississippi State University
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Mr. Mike Selman, Buena Vista Turf Farm
Mr. Mark Johnson, Golf Course Superintendents Assoc. of America
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Introduction

The quality and scientific merit of NTEP data is extremely important. However, the evaluation of turfgrass species and cultivars is a difficult and complex issue. Furthermore, turfgrass evaluation is generally a subjective process based on visual estimates of factors, like genetic color, stand density, leaf texture, uniformity and quality. These factors can not be measured in the same way as other agricultural crops. Turfgrass quality is not a measure of yield or nutritive value. Turfgrass quality is a measure of aesthetics (i.e. density, uniformity, texture, smoothness, growth habit and color), and functional use. The most common way of assessing turfgrass quality is a visual rating system that is based on the turfgrass evaluator's judgement.

General Considerations

Most visual ratings collected on NTEP trials are based on a 1 to 9 rating scale. One is the poorest or lowest and 9 is the best or highest rating. However, a few characteristics, such as winter kill or percent living ground cover, are rated on a percentage basis, again by using the evaluator's judgement. Most disease ratings found in NTEP reports will use the 1-9 scale, 9=no disease except where the evaluator made a judgement of the percentage of disease in each plot. Percent disease data will be found in separate tables and will normally not be included with disease data using the 1-9 scale.

Turfgrass Quality

Turfgrass Quality is based on 9 being outstanding or ideal turf and 1 being poorest or dead. A rating of 6 or above is generally considered acceptable. A quality rating value of 9 is reserved for a perfect or ideal grass, but it also can reflect an absolutely outstanding treatment plot. The NTEP requires quality ratings on a monthly basis. Quality ratings take into account the aesthetic and functional aspects of the turf. Quality ratings are not based on color alone, but on a combination of color, density, uniformity, texture, and disease or environmental stress.

Turfgrass quality ratings are grouped and presented by region, management level, a particular stress (shade, traffic, etc.) and in some cases, by individual location (starting with 2001 data, data from each location will be posted separately as well on the NTEP web site, *http://www.ntep.org*). Also available now is a summary table (Appendix) in the back of this report. This summary table includes various statistical measures not previously compiled for NTEP reports. For an explanation of this table and these changes, please go to the NTEP web site at *http://www.ntep.org/pdf/grandmean.mem.pdf.*

Other Ratings

More detailed information on the ratings of specific characteristics can be found on the NTEP web site at *http://www.ntep.org/reports/ratings.htm*.

2015 NATIONAL LOW INPUT COOL-SEASON TEST

LOCATIONS SUBMITTING DATA FOR 2020

State	Location	Code
Connecticut	Storrs	CT1
Connecticut	Storrs	CT2
Indiana	West Lafayette	IN1
Indiana	West Lafayette (Medium Input)	IN2
Michigan	East Lansing	MI1
Minnesota	St. Paul	MN1
Missouri	Columbia	MO1
Missouri	Columbia	MO2
North Carolina	Raleigh	NC1
Nebraska	Mead	NE1
Oregon	Corvallis	OR1
Pennsylvania	Kennett Square	PA2
Utah	Logan	UT1
Virginia	Blacksburg	VA1

2015 National Low Input Cool-Season Test
Entries and Sponsors

Entry No.	Name	Species/Composition	Sponsor
*1	Natural Knit® PRG Mix	50% Mensa perennial ryegrass 50% Savant perennial ryegrass	Ledeboer Seed LLC
*2	Bullseye	100% Bullseye tall fescue	Standard entry
*3	Bewitched	100% Bewitched Ky. Bluegrass	Standard entry
4	BGR-TF3	100% BGR-TF3 tall fescue	Berger International LLC
5	MNHD-15	100% MNHD-15 hard fescue	University of Minnesota
6	DLFPS TF-A	33% Mustang 4 tall fescue 33% Grande 3 tall fescue 34% Fayette tall fescue	DLF/Pickseed/Seed Research of OR
7	DLFPS ChCrM	24% Longfellow 3 chewings fescue 24% Windward chewings fescue 24% Chantilly strong creeping red fescue 25% Ruddy strong creeping red fescue 3% Microclover ™	DLF/Pickseed/Seed Research of OR
8	DLFPS ShHM	32% Quatro sheep fescue 32% Spartan II hard fescue 33% Eureka II hard fescue 3% Microclover ™	DLF/Pickseed/Seed Research of OR
9	DLFPS TFAM	32% Mustang 4 tall fescue 32% Grande 3 tall fescue 33% Fayette tall fescue 3% Microclover ™	DLF/Pickseed/Seed Research of OR
*10	Vitality Low Maintenance Mixture	80% VNS hard fescue 20% VNS chewings fescue	Landmark Turf & Native Seed
*11	Vitality Double Coverage Mixture	90% VNS tall fescue 10% VNS Kentucky bluegrass	Landmark Turf & Native Seed
*12	Chantilly	100% Chantilly strong creeping red	Standard entry
*13	Dutch White Clover	100% Dutch White Clover	Standard entry
14	DLFPS TFAStC	32% Mustang 4 tall fescue 32% Grande 3 tall fescue 33% Fayette tall fescue 3% strawberry clover	DLF/Pickseed/Seed Research of OR
15	DLFPS ChCrSH	14% Longfellow 3 chewings fescue 14% Windward chewings fescue 14% Chantilly strong creeping red fescue 14% Ruddy strong creeping red fescue 14% Quatro sheep fescue 14% Eureka hard fescue 14% Spartan hard fescue	DLF/Pickseed/Seed Research of OR
*16	Spartan II	100% Spartan II hard fescue	Standard entry
*17	Quatro	100% Quatro sheep fescue	Standard entry
*18	Ky-31 E+	100% Ky-31 tall fescue w/endophyte	Standard entry

Entry No.	Name	Species/Composition	Sponsor
19	CRS Mix #1	55% Gladiator hard fescue 45% 4GUD hard fescue	Columbia River Seed
20	CRS Mix #2	67% Gladiator hard fescue 33% NAI13-14 Kentucky bluegrass	Columbia River Seed
21	CRS Mix #3	45% Gladiator hard fescue 45% Sword hard fescue 10% Dutch White Clover	Columbia River Seed
22	DTT Tall Fescue Mix	50% DTT20 tall fescue 50% DTT43 tall fescue	Allied Seed LLC
23	DTTHO TF/KBG Mix	45% DTT20 tall fescue 45% DTT43 tall fescue 10% Holiday lawn Ky. Bluegrass	Allied Seed LLC
24	A-SFT	100% A-SFT tall fescue	Allied Seed LLC
*25	Kingdom	100% Kingdom tall fescue	SiteOne Landscape Supply
*26	Resolute (7H7)	100% 7H7 hard fescue	SiteOne Landscape Supply
27	Northern Mixture	40% VNS perennial ryegrass 20% VNS Kentucky bluegrass 20% VNS chewings fescue 20% VNS creeping red fescue	ProSeeds Marketing
28	Southern Mixture	70% VNS tall fescue 10% VNS Kentucky bluegrass 10% VNS perennial ryegrass 10% VNS chewings fescue	ProSeeds Marketing
*29	CS Mix	40% Castle chewings fescue 40% Sword hard fescue 10% Kent creeping red fescue 10% B-15.2415 Blue Mesa sheep fescue	Columbia Seeds LLC
*30	Yaak	100% Yaak western yarrow	Pacific NW Natives
*31	Radar	100% Radar chewings fescue	Standard entry
*32	Kenblue	100% Kenblue Kentucky bluegrass	Standard entry

* Commercially Available in the USA in 2021

TABLE A. 2020 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN THE 2015 NATIONAL LOW INPUT COOL-SEASON TEST

LOCATION	SOIL TEXTURE	SOIL PH	SOIL PHOSPHOROUS (LBS/ACRE)	SOIL POTASSIUM (LBS/ACRE)	NITROGEN (LBS/1000 SQ FT)	SUN OR SHADE	MOWING HEIGHT (IN)	IRRIGATION PRACTICED
CT1	SANDY LOAM	6.1-6.5	0-60	151-240	-	FULL SUN	3.6-4.0	NO IRRIGATION
CT2	SANDY LOAM	6.1-6.5	0-60	151-240	-	FULL SUN	3.6-4.0	NO IRRIGATION
IN1	SILT LOAM AND SILT	7.1-7.5	61-150	151-240	1.1-2.0	FULL SUN	4.1+	NO IRRIGATION
IN2	SILT LOAM AND SILT	7.1-7.5	61-150	151-240	1.1-2.0	FULL SUN	4.1+	NO IRRIGATION
MI1	-	-	-	-	-	-	-	-
MN1	SILTY CLAY LOAM	6.1-6.5	61-150	241-375	0.0-1.0	FULL SUN	3.1-3.5	NO IRRIGATION
MO1	SILT LOAM AND SILT	5.6-6.0	0-60	151-240	0.0-1.0	FULL SUN	2.6-3.0	NO IRRIGATION
MO2	SILT LOAM AND SILT	5.6-6.0	0-60	151-240	0.0-1.0	FULL SUN	2.6-3.0	NO IRRIGATION
NC1	SILTY CLAY LOAM	6.1-6.5	61-150	0-150	3.1-4.0	FULL SUN	3.1-3.5	TO PREVENT STRESS
NE1	SILTY CLAY AND CLAY	7.1-7.5	0-60	376-500	0.0-1.0	FULL SUN	2.6-3.0	NO IRRIGATION
OR1	SILTY CLAY LOAM	6.1-6.5	0-60	241-375	0.0-1.0	FULL SUN	2.6-3.0	NO IRRIGATION
PA2	SILT LOAM AND SILT	6.1-6.5	61-150	241-375	0.0-1.0	FULL SUN	2.6-3.0	NO IRRIGATION
UT1	SILT LOAM AND SILT	7.1-7.5	-	-	-	FULL SUN	3.6-4.0	NO IRRIGATION
VA1	SILT LOAM AND SILT	5.6-6.0	0-60	0-150	0.0-1.0	FULL SUN	3.1-3.5	NO IRRIGATION

TABLE B. LOCATIONS AND DATA COLLECTED IN 2020

LOCATION	JANUARY QUALITY RATING	FEBRUARY QUALITY RATING	MARCH QUALITY RATING	APRIL QUALITY RATING	MAY QUALITY RATING	JUNE QUALITY RATING	JULY QUALITY RATING	AUGUST QUALITY RATING	SEPTEMBER QUALITY RATING	OCTOBER QUALITY RATING	NOVEMBER QUALITY RATING	DECEMBER QUALITY RATING	SPRING GREENUP	SUMMER DENSITY
CT1					X	X	X	X	X	X			X	
CT2					X	X	X	X	X	X			X	
IN1					X	X	X	X						X
IN2					X	X	X	X						X
MI1					X	X	X		X	X				
MN1					X	X	X	X	X					
MO1				X	X	X	X	X	X	X				
MO2				X	X	X	X	X	X	X				
NC1		X	X	X	X	X	X	X	X	X	X		X	
NE1						X	X	X	X	X				
OR1	X	X	X	X	X	X	X	X	X	X	X	X		
PA2			X							X				
UT1					X	X	X	X	X	X			X	
VA1					X	X	X	X	X	X				

TABLE B. LOCATIONS AND DATA COLLECTED IN 2020

LOCATION	PERCENT COVER SPRING	PERCENT COVER SUMMER	PERCENT COVER FALL	UNIFORMITY RATINGS	PERCENT WEEDS (SEPTEMBER)	ADDITIONAL PERCENT WEED DATA	PERCENT PLANTED SPECIES	PERCENT BARE SOIL SPRING	PERCENT BARE SOIL SUMMER	PERCENT BARE SOIL FALL
CT1			X			X				
CT2			X			X				
IN1				X						
IN2				X						
MI1			X							
MN1	X	X	X			X		X	X	X
MO1										
MO2										
NC1	X	X	X			X				
NE1			X							
OR1			X			X				
PA2	X		X			X	X			
UT1	X				X					
VA1						X	X			

TABLE 1. MEAN TURFGRASS QUALITY RATINGS OF COOL-SEASON CULTIVARS GROWN UNDER 1/
LOW INPUT IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 **/
2020 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	# Entry	CT1	PA2	VA1	NC1	MI1	MO1	NE1	UT1	MEAN
* BULLSEYE	2	5.5	3.3	7.1	4.9	6.3	5.9	4.8	3.1	5.4
DLFPS TFASTC	14	5.8	3.1	7.1	5.3	5.9	5.6	4.3	3.2	5.3
DLFPS TFAM	9	6.0	2.7	6.8	5.8	5.5	5.3	4.4	3.3	5.2
DLFPS TF-A	6	5.3	2.9	6.8	4.9	5.9	5.3	4.9	3.5	5.1
* VITALITY DOUBLE	11	4.8	3.0	6.8	5.1	5.9	5.7	4.1	3.3	5.1
MNHD-15	5	5.7	3.3	7.0	3.3	6.0	5.3	4.3	2.1	5.0
A-SFT	24	4.3	3.2	6.8	4.3	6.1	5.9	4.0	2.8	5.0
* KINGDOM	25	4.6	2.9	6.6	4.2	5.9	5.2	4.8	3.2	4.9
DLFPS CHCRM	7	5.8	3.0	6.8	4.0	5.6	5.2	3.7	2.0	4.9
* KY-31 E+	18	5.3	2.6	6.4	4.2	5.7	4.5	5.3	3.3	4.9
BGR-TF3	4	5.0	2.6	6.5	5.0	5.5	4.9	4.5	3.4	4.9
CRS MIX #3	21	6.6	3.1	7.0	2.8	5.6	5.3	3.4	0.6	4.8
CRS MIX #2	20	5.3	3.3	7.0	3.4	5.8	5.4	3.7	1.9	4.8
DTT TALL FESCUE MIX	22	4.7	2.7	6.4	4.4	5.7	4.9	4.9	3.4	4.8
DTTHO TF/KBG MIX	23	4.3	2.9	6.6	4.1	5.9	5.5	4.2	2.8	4.8
DLFPS CHCRSH	15	5.1	3.0	6.8	4.0	5.6	5.3	3.4	2.1	4.7
* VITALITY LOW	10	5.5	2.9	6.7	4.0	5.5	5.0	3.7	2.2	4.7
* NATURAL KNIT ® PRG MIX	1	4.1	3.2	6.8	3.0	6.2	6.3	3.4	1.4	4.7
SOUTHERN MIXTURE	28	4.4	2.7	6.5	4.5	5.6	5.2	3.9	3.0	4.7
* CS MIX	29	5.1	2.8	6.7	4.4	5.3	5.3	3.1	2.2	4.7
CRS MIX #1	19	5.5	2.8	6.6	3.4	5.5	4.5	4.2	2.2	4.7
* CHANTILLY	12	4.5	3.1	6.8	3.4	5.8	5.6	3.2	1.8	4.6
NORTHERN MIXTURE	27	4.5	2.9	6.7	4.2	5.5	5.5	3.0	2.1	4.6
* RADAR	31	4.4	2.9	6.7	4.1	5.5	5.5	3.1	2.2	4.6
* RESOLUTE (7H7)	26	5.7	2.7	6.5	3.3	5.3	4.2	4.2	2.1	4.6
DLFPS SHHM	8	5.4	2.5	6.4	3.9	5.2	5.1	3.3	1.6	4.6
* YAAK	30	3.7	2.4	6.1	4.7	5.5	4.7	4.6	3.8	4.5
* SPARTAN II	16	5.4	2.8	6.6	3.2	5.3	4.9	3.3	1.4	4.5
* QUATRO	17	4.6	2.8	6.6	3.4	5.4	5.4	2.9	1.4	4.4
* BEWITCHED	3	3.1	2.6	6.1	2.5	5.6	5.4	3.0	1.3	4.1
KENBLUE	32	2.9	2.4	6.0	3.1	5.4	5.2	3.2	2.0	4.0
* DUTCH WHITE CLOVER	13	2.6	2.4	5.9	2.4	5.4	5.5	2.5	1.0	3.8
LSD VALUE		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
C.V. (%)		12.7	21.6	9.3	15.5	10.9	11.7	16.0	26.1	13.1

*/ COMMERCIALLY AVAILABLE IN THE USA IN 2021.

**/ ENTRIES WITHIN THIS TABLE ARE ORDERED BY THE OVERALL MEAN AND HAVE SIMILAR TURF QUALITY PERFORMANCES IN ALL TEST LOCATIONS INCLUDED IN THIS LPI GROUP. IF YOUR STATE IS NOT REPRESENTED, THEN CHOOSE A LPI GROUP THAT CONTAINS A LOCATION AND MANAGEMENT SIMILAR TO YOUR PLANTING CONDITIONS. FOR MORE INFORMATION ON LPI, GO TO WWW.NTEP.ORG/LPI_Q&A.PDF

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 2. MEAN TURFGRASS QUALITY RATINGS OF COOL-SEASON CULTIVARS GROWN UNDER 1/
LOW INPUT IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
2020 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	# Entry	IN1	MN1	OR1	MEAN
CRS MIX #1	19	5.0	5.8	3.6	4.8
CRS MIX #2	20	5.2	5.5	3.6	4.8
VITALITY LOW	10	5.1	5.0	4.1	4.7
DLFPS CHCRSH	15	5.2	4.8	4.1	4.7
RESOLUTE (7H7)	26	4.8	5.8	3.5	4.7
RADAR	31	5.3	4.3	4.0	4.5
MNHD-15	5	4.9	5.4	3.3	4.5
DLFPS CHCRM	7	4.8	4.5	4.1	4.4
NORTHERN MIXTURE	27	5.2	4.0	4.1	4.4
SPARTAN II	16	4.7	5.0	3.6	4.4
CS MIX	29	5.0	4.0	4.3	4.4
CHANTILLY	12	5.1	4.6	3.3	4.3
VITALITY DOUBLE	11	5.1	3.1	4.0	4.1
DLFPS TFASTC	14	4.8	2.9	4.5	4.1
SOUTHERN MIXTURE	28	5.0	3.5	3.6	4.0
QUATRO	17	4.5	3.8	3.3	3.9
DLFPS TF-A	6	4.7	2.9	3.6	3.7
YAAK	30	5.0	3.1	3.0	3.7
BGR-TF3	4	4.6	2.8	3.7	3.7
CRS MIX #3	21	3.6	4.0	3.3	3.6
DTT TALL FESCUE MIX	22	4.5	3.1	2.9	3.5
A-SFT	24	4.7	2.6	3.0	3.5
BULLSEYE	2	4.4	2.3	3.5	3.4
KINGDOM	25	4.5	2.9	2.7	3.4
DTTHO TF/KBG MIX	23	4.5	2.7	2.7	3.3
KY-31 E+	18	4.0	3.0	2.7	3.2
DLFPS TFAM	9	4.0	1.1	4.4	3.2
DLFPS SHHM	8	3.5	1.9	3.3	2.9
KENBLUE	32	4.2	2.4	1.8	2.8
BEWITCHED	3	3.7	1.9	1.3	2.3
NATURAL KNIT ® PRG MIX	1	3.6	1.4	1.7	2.2
DUTCH WHITE CLOVER	13	3.4	1.2	1.1	1.9
LSD VALUE		1.0	1.0	1.0	1.0
C.V. (%)		13.5	17.8	18.8	16.3

*/ ENTRIES WITHIN THIS TABLE ARE ORDERED BY THE OVERALL MEAN AND HAVE SIMILAR TURF QUALITY PERFORMANCES IN ALL TEST LOCATIONS INCLUDED IN THIS LPI GROUP. IF YOUR STATE IS NOT REPRESENTED, THEN CHOOSE A LPI GROUP THAT CONTAINS A LOCATION AND MANAGEMENT SIMILAR TO YOUR PLANTING CONDITIONS. FOR MORE INFORMATION ON LPI, GO TO WWW.NTEP.ORG/LPI_Q&A.PDF

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 3. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF COOL-SEASON CULTIVARS UNDER LOW INPUT WITH INITIAL ANNUAL GRASS PRE-EMERGENCE AT STORRS, CT 1/
2020 DATA

TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	SPRING GREENUP	% GROUND COVER FALL	PERCENT WEEDS SUMMER	PERCENT WEEDS FALL	QUALITY RATINGS MAY	JUN	JUL	AUG	SEP	OCT	MEAN
CRS MIX #3	4.0	94.3	14.3	5.7	5.7	6.3	6.7	7.0	7.3	6.7	6.6
DLFPS TFAM	5.3	85.0	11.7	15.0	5.3	6.0	6.7	7.7	7.0	6.0	6.4
CRS MIX #2	4.0	86.7	21.7	23.3	6.0	5.7	5.7	6.0	6.7	6.0	6.0
DLFPS CHCRM	5.3	88.3	13.3	5.7	5.7	6.0	6.3	5.7	6.3	6.0	6.0
VITALITY LOW	4.7	95.3	25.0	8.3	4.7	6.0	5.7	6.3	6.7	6.7	6.0
CRS MIX #1	5.0	86.7	25.0	13.3	5.0	5.7	5.7	6.3	6.7	6.3	5.9
DLFPS TFASTC	5.0	86.7	25.0	23.3	5.3	6.0	5.3	6.3	6.0	5.7	5.8
VITALITY DOUBLE	5.0	88.3	21.7	35.0	5.7	5.7	5.7	6.7	6.0	5.0	5.8
MNHD-15	4.3	86.7	35.0	21.7	4.7	5.3	6.0	6.0	6.3	5.7	5.7
DLFPS TF-A	6.0	80.0	48.3	28.3	4.7	4.7	4.7	5.7	6.3	5.7	5.3
DLFPS SHHM	4.3	80.0	41.7	33.3	4.0	4.7	6.0	6.0	5.0	5.7	5.2
CS MIX	4.0	80.0	35.0	30.0	4.3	5.3	5.0	5.7	5.3	5.0	5.1
RESOLUTE (7H7)	3.7	83.3	35.0	26.7	4.7	4.3	5.3	5.7	6.0	4.7	5.1
RADAR	5.3	58.3	33.3	38.3	4.3	5.7	5.0	5.3	4.7	4.7	4.9
BULLSEYE	5.7	78.3	36.7	26.7	4.3	4.7	4.7	5.0	5.3	4.7	4.8
NORTHERN MIXTURE	5.7	61.7	41.7	51.7	4.3	5.0	5.0	4.7	5.0	4.7	4.8
BGR-TF3	4.7	66.7	51.7	41.7	3.0	4.7	4.7	4.7	5.7	5.3	4.7
SPARTAN II	3.0	71.7	31.7	33.3	3.3	4.7	5.7	4.7	5.0	5.0	4.7
KY-31 E+	5.7	65.0	51.7	40.0	4.3	4.3	4.7	5.3	4.3	4.7	4.6
DLFPS CHCRSH	5.0	55.0	56.7	58.3	3.7	5.3	4.7	4.7	4.3	4.0	4.4
KINGDOM	3.7	50.0	63.3	40.0	2.7	5.0	4.3	4.7	4.7	5.0	4.4
SOUTHERN MIXTURE	5.0	28.3	41.7	45.0	4.3	5.3	4.7	4.0	4.7	3.3	4.4
CHANTILLY	6.7	35.0	60.0	56.7	4.0	4.7	4.3	4.7	4.0	4.0	4.3
DTTHO TF/KBG MIX	4.0	43.3	66.7	45.0	3.7	4.3	4.7	5.7	4.3	3.3	4.3
A-SFT	3.7	43.3	63.3	61.7	3.3	4.7	3.7	5.3	4.7	3.7	4.2
DTT TALL FESCUE MIX	4.3	56.7	61.7	45.0	2.3	4.7	4.7	4.3	4.7	4.7	4.2
NATURAL KNIT ® PRG MIX	6.3	18.3	63.3	80.0	2.3	4.3	3.3	4.0	3.7	2.3	3.3
QUATRO	2.7	60.0	66.7	60.0	3.0	3.7	3.7	3.3	3.3	2.3	3.2
YAAK	3.7	16.7	70.0	85.0	1.7	3.3	4.0	5.0	2.7	2.3	3.2
BEWITCHED	4.0	20.0	80.0	85.0	1.7	4.3	3.0	3.3	3.0	2.3	2.9
KENBLUE	5.0	3.7	90.0	90.0	2.0	2.7	2.7	2.7	2.0	2.0	2.3
DUTCH WHITE CLOVER	2.3	5.3	83.3	91.7	1.0	1.7	2.0	2.3	1.7	1.0	1.6
LSD VALUE	1.3	24.9	26.0	29.1	1.7	1.0	1.3	1.3	1.3	1.3	0.8
C.V. (%)	17.2	26.4	35.2	43.2	26.2	13.1	16.6	15.6	17.1	18.7	10.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 4. MEAN TURFGRASS QUALITY RATINGS OF COOL-SEASON CULTIVARS
UNDER LOW INPUT WITH INITIAL ANNUAL GRASS PRE-EMERGENCE AT COLUMBIA, MO 1/
2020 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/

NAME	APR	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
CS MIX	6.7	6.7	7.0	6.0	5.0	6.0	6.0	6.2
DLFPS TFAM	6.3	6.0	6.3	6.0	5.3	6.0	6.0	6.0
RADAR	5.7	6.0	6.0	5.7	5.0	5.3	6.0	5.7
QUATRO	6.0	6.0	6.0	5.0	5.0	5.7	5.7	5.6
CHANTILLY	6.0	6.3	5.7	5.0	4.7	5.3	5.3	5.5
CRS MIX #2	5.7	6.0	5.3	5.0	5.0	5.7	5.7	5.5
DLFPS TFASTC	5.7	6.0	5.7	5.0	5.0	5.0	5.3	5.4
DUTCH WHITE CLOVER	5.7	6.7	6.0	5.0	4.3	5.0	5.3	5.4
NATURAL KNIT ® PRG MIX	5.7	6.0	5.3	5.3	4.7	5.3	5.3	5.4
SOUTHERN MIXTURE	5.7	5.3	5.7	5.3	5.0	5.0	5.3	5.3
DLFPS TF-A	5.7	5.7	5.3	5.3	4.7	4.7	5.0	5.2
KINGDOM	5.3	5.0	5.3	5.7	4.7	5.0	5.3	5.2
KY-31 E+	5.3	5.7	5.3	4.7	4.7	5.3	5.3	5.2
MNHD-15	5.3	5.3	5.7	4.7	5.0	5.0	5.0	5.1
SPARTAN II	5.3	5.7	5.7	5.0	4.3	4.7	5.0	5.1
CRS MIX #3	5.0	4.7	5.7	5.0	4.3	5.0	5.0	5.0
DLFPS CHCRSH	4.7	4.7	5.3	4.7	5.0	5.3	5.3	5.0
DTT TALL FESCUE MIX	5.0	6.0	5.3	5.0	4.3	4.7	5.0	5.0
DTTHO TF/KBG MIX	6.0	5.0	5.3	4.7	4.7	4.7	5.0	5.0
RESOLUTE (7H7)	5.7	5.7	5.3	5.0	4.0	4.7	4.7	5.0
VITALITY LOW	4.3	4.7	5.0	5.3	5.0	5.0	5.0	4.9
DLFPS CHCRM	4.7	5.3	5.3	4.7	4.3	4.7	4.3	4.8
KENBLUE	5.3	5.3	4.7	4.3	4.3	4.3	4.7	4.7
CRS MIX #1	4.0	4.0	4.7	5.0	4.3	5.0	5.0	4.6
A-SFT	4.7	4.3	4.3	5.0	4.3	4.3	4.7	4.5
YAAK	4.7	4.7	4.7	5.0	4.0	4.0	4.7	4.5
DLFPS SHHM	4.3	5.0	5.3	4.3	4.0	4.0	4.0	4.4
BEWITCHED	4.3	4.0	4.0	4.3	3.7	4.0	4.3	4.1
BGR-TF3	4.3	4.3	4.0	4.0	3.7	3.7	4.0	4.0
NORTHERN MIXTURE	4.3	3.7	4.0	4.3	4.0	3.7	4.0	4.0
BULLSEYE	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.5
VITALITY DOUBLE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
LSD VALUE	3.1	2.3	2.8	2.3	1.7	2.5	2.6	2.0
C.V. (%)	23.5	21.7	22.3	18.2	15.9	20.7	20.0	17.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 5. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF COOL-SEASON CULTIVARS WITH ADDITIONAL FERTILIZER (MEDIUM INPUT) AT WEST LAFAYETTE, IN 1/
2020 DATA

TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	SUMMER DENSITY	UNIFORMITY	QUALITY RATINGS MAY	JUN	JUL	AUG	MEAN
DLFPS CHCRSH	7.7	7.3	4.3	6.0	5.3	6.3	5.5
RADAR	5.7	6.7	4.3	6.0	5.0	5.7	5.3
A-SFT	5.7	7.0	4.7	4.3	5.7	5.7	5.1
DTTHO TF/KBG MIX	5.7	7.0	4.7	4.7	5.7	5.0	5.0
VITALITY LOW	7.0	6.0	4.7	5.3	4.7	5.3	5.0
CS MIX	7.3	6.3	4.0	5.0	5.0	5.7	4.9
NORTHERN MIXTURE	6.3	6.7	3.7	5.3	5.3	5.3	4.9
VITALITY DOUBLE	5.7	6.0	4.3	4.3	5.7	5.3	4.9
CHANTILLY	7.3	6.7	3.7	4.7	5.0	6.0	4.8
DLFPS CHCRM	7.3	7.3	4.0	5.0	4.3	6.0	4.8
DLFPS TF-A	5.7	7.0	4.0	4.7	5.7	5.0	4.8
MNHD-15	6.3	6.0	4.3	5.7	4.0	5.3	4.8
DLFPS TFASTC	5.7	6.7	4.3	4.7	4.3	5.3	4.7
SOUTHERN MIXTURE	6.0	5.0	3.7	5.0	5.3	4.7	4.7
SPARTAN II	6.7	6.0	3.3	5.0	4.7	5.3	4.6
KENBLUE	5.3	5.3	4.0	4.7	5.0	4.3	4.5
DLFPS TFAM	4.7	5.3	5.0	3.7	4.7	4.3	4.4
NATURAL KNIT ® PRG MIX	5.0	4.3	4.7	3.7	4.3	5.0	4.4
YAAK	3.7	6.0	4.3	4.0	5.3	4.0	4.4
BEWITCHED	4.3	5.7	4.0	4.0	4.7	4.7	4.3
BULLSEYE	5.0	5.3	4.3	3.7	4.7	4.7	4.3
KINGDOM	4.7	4.7	3.0	4.3	5.0	5.0	4.3
BGR-TF3	5.7	7.0	4.0	4.3	3.7	4.7	4.2
DTT TALL FESCUE MIX	6.3	6.0	3.7	4.7	3.3	5.0	4.2
RESOLUTE (7H7)	4.7	4.3	4.0	3.7	4.3	4.7	4.2
CRS MIX #1	6.0	6.0	2.3	4.0	4.7	5.3	4.1
CRS MIX #2	6.0	5.3	3.0	3.7	4.3	5.3	4.1
QUATRO	4.7	4.7	3.7	4.3	4.3	4.0	4.1
KY-31 E+	4.0	7.3	3.3	4.0	4.3	4.0	3.9
DLFPS SHHM	3.3	4.0	3.7	2.7	4.7	3.7	3.7
DUTCH WHITE CLOVER	3.0	3.0	4.0	2.3	4.0	2.7	3.3
CRS MIX #3	3.0	3.3	4.0	2.7	3.0	3.0	3.2
LSD VALUE	2.2	2.6	4.0	1.7	3.0	1.6	1.1
C.V. (%)	22.2	22.8	27.3	20.7	21.9	17.5	12.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 6. SPRING GREENUP RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT IN THE U.S.
2020 DATA

SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN 2/

NAME	CT1	NC1	UT1	MEAN
YAAK	6.0	6.0	5.0	5.7
DLFPS TFAM	6.0	7.3	3.3	5.6
SOUTHERN MIXTURE	5.3	7.0	4.0	5.4
VITALITY LOW	5.7	6.7	3.7	5.3
DLFPS TF-A	5.3	6.7	3.7	5.2
DLFPS TFASTC	6.0	6.3	3.3	5.2
CHANTILLY	6.7	6.0	2.3	5.0
BGR-TF3	5.0	6.0	4.0	5.0
NORTHERN MIXTURE	5.7	6.7	2.7	5.0
BULLSEYE	5.7	6.0	3.0	4.9
DLFPS CHCRSH	5.0	6.7	3.0	4.9
VITALITY DOUBLE	5.0	5.7	4.0	4.9
DLFPS CHCRM	5.3	6.3	3.0	4.9
RADAR	5.3	6.7	2.7	4.9
KY-31 E+	5.7	3.7	4.7	4.7
DTTHO TF/KBG MIX	5.3	4.3	4.0	4.6
KINGDOM	5.0	5.0	3.7	4.6
CRS MIX #2	5.7	5.7	2.0	4.4
A-SFT	5.3	5.3	2.7	4.4
DTT TALL FESCUE MIX	6.0	4.3	3.0	4.4
CS MIX	4.7	6.0	2.3	4.3
RESOLUTE (7H7)	5.3	5.7	1.7	4.2
KENBLUE	5.0	4.7	2.7	4.1
CRS MIX #1	4.3	5.3	2.3	4.0
DLFPS SHHM	4.3	5.7	1.3	3.8
NATURAL KNIT ® PRG MIX	6.3	3.7	1.3	3.8
SPARTAN II	4.3	5.7	1.3	3.8
BEWITCHED	5.3	3.3	2.0	3.6
MNHD-15	4.0	5.0	1.7	3.6
CRS MIX #3	4.7	4.7	1.0	3.4
QUATRO	3.3	3.3	2.0	2.9
DUTCH WHITE CLOVER	4.3	1.3	1.3	2.3
LSD VALUE	1.5	1.8	0.9	0.8
C.V. (%)	17.4	20.2	20.5	19.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 7. SUMMER DENSITY RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT IN THE U.S.
2020 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 2/

NAME	IN1
CRS MIX #1	8.0
RADAR	7.7
CS MIX	7.3
DLFPS CHCRM	7.3
DLFPS CHCRSH	7.3
CHANTILLY	7.0
MNHD-15	7.0
VITALITY LOW	7.0
CRS MIX #2	6.7
RESOLUTE (7H7)	6.7
A-SFT	6.3
NORTHERN MIXTURE	6.3
VITALITY DOUBLE	6.3
DTT TALL FESCUE MIX	6.0
KENBLUE	6.0
QUATRO	6.0
SOUTHERN MIXTURE	6.0
BGR-TF3	5.7
DLFPS TFASTC	5.7
KINGDOM	5.3
SPARTAN II	5.3
BEWITCHED	5.0
DLFPS SHHM	5.0
DLFPS TFAM	4.7
DTTHO TF/KBG MIX	4.7
NATURAL KNIT ® PRG MIX	4.7
BULLSEYE	4.3
DLFPS TF-A	4.3
KY-31 E+	4.0
CRS MIX #3	3.3
YAAK	3.3
DUTCH WHITE CLOVER	3.0
LSD VALUE	1.8
C.V. (%)	19.2

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 8. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT IN THE U.S.
2020 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/

NAME	MN1	NC1	PA2	UT1	MEAN
YAAK	86.7	94.3	98.3	83.3	90.7
VITALITY DOUBLE	85.3	99.0	96.0	73.3	88.4
BULLSEYE	84.0	97.7	98.3	73.3	88.3
SOUTHERN MIXTURE	86.7	96.3	98.3	70.0	87.8
DLFPS TF-A	87.0	99.0	97.7	66.7	87.6
DTTHO TF/KBG MIX	85.3	83.3	98.3	76.7	85.9
DTT TALL FESCUE MIX	85.0	91.3	97.0	70.0	85.8
DLFPS TFASTC	86.0	92.7	99.0	63.3	85.3
KINGDOM	81.3	91.0	98.0	70.0	85.1
BGR-TF3	86.0	99.0	95.0	60.0	85.0
VITALITY LOW	88.3	81.7	98.3	63.3	82.9
KY-31 E+	72.3	80.0	98.0	80.0	82.6
A-SFT	79.7	93.3	99.0	53.3	81.3
DLFPS CHCRSH	82.0	83.3	97.0	56.7	79.8
DLFPS TFAM	54.0	99.0	97.7	63.3	78.5
CS MIX	87.7	80.0	98.0	46.7	78.1
RADAR	84.3	88.3	98.7	40.0	77.8
CHANTILLY	84.0	86.7	99.0	40.0	77.4
KENBLUE	75.3	78.3	98.0	56.7	77.1
DLFPS CHCRM	85.3	73.3	98.3	46.7	75.9
NORTHERN MIXTURE	80.7	91.3	99.0	30.0	75.3
MNHD-15	90.0	85.0	98.3	20.0	73.3
SPARTAN II	91.7	75.0	98.7	23.3	72.2
CRS MIX #1	88.0	66.7	98.0	33.3	71.5
RESOLUTE (7H7)	93.3	71.7	97.3	23.3	71.4
CRS MIX #3	85.0	78.3	98.3	16.7	69.6
CRS MIX #2	91.3	71.7	97.7	16.7	69.3
BEWITCHED	71.3	78.3	99.0	26.7	68.8
QUATRO	87.0	53.3	98.3	23.3	65.5
NATURAL KNIT ® PRG MIX	63.7	73.3	96.0	20.0	63.3
DLFPS SHHM	58.0	68.3	96.0	23.3	61.4
DUTCH WHITE CLOVER	62.7	65.0	99.0	16.7	60.8
LSD VALUE	11.9	18.8	1.8	15.9	6.9
C.V. (%)	9.1	14.0	1.1	20.7	11.0

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 9. PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT IN THE U.S.
2020 DATA

	PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 2/		
NAME	MN1	NC1	MEAN
CRS MIX #2	95.3	90.0	92.7
DLFPS TF-A	86.3	97.7	92.0
RESOLUTE (7H7)	94.3	88.3	91.3
YAAK	85.7	96.0	90.8
VITALITY DOUBLE	85.0	94.7	89.8
BGR-TF3	86.3	93.3	89.8
DLFPS TFASTC	86.3	93.3	89.8
KINGDOM	86.3	93.0	89.7
DTT TALL FESCUE MIX	84.0	94.0	89.0
DTTHO TF/KBG MIX	84.7	93.3	89.0
BULLSEYE	83.7	93.3	88.5
MNHD-15	89.7	86.3	88.0
QUATRO	86.7	88.3	87.5
A-SFT	82.7	91.3	87.0
CRS MIX #1	87.3	86.3	86.8
CRS MIX #3	86.7	83.3	85.0
SPARTAN II	91.7	71.7	81.7
KY-31 E+	73.3	86.7	80.0
NORTHERN MIXTURE	80.0	79.0	79.5
RADAR	85.3	73.3	79.3
BEWITCHED	73.3	85.0	79.2
DLFPS CHCRSH	81.7	75.0	78.3
CS MIX	88.3	66.7	77.5
DUTCH WHITE CLOVER	63.3	91.7	77.5
SOUTHERN MIXTURE	86.0	68.3	77.2
CHANTILLY	84.0	70.0	77.0
VITALITY LOW	90.0	63.3	76.7
DLFPS TFAM	53.7	96.3	75.0
DLFPS CHCRM	86.7	60.0	73.3
NATURAL KNIT ® PRG MIX	62.7	80.0	71.3
KENBLUE	75.7	61.7	68.7
DLFPS SHHM	58.0	73.0	65.5
LSD VALUE	12.3	16.1	10.1
C.V. (%)	9.3	12.0	10.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 10. PERCENT LIVING GROUND COVER (FALL) RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT IN THE U.S.
2020 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	CT1	MI1	MN1	NC1	NE1	OR1	PA2	MEAN
DLFPS TFASTC	85.0	96.0	85.0	89.7	94.7	79.3	98.7	89.8
MNHD-15	97.0	94.7	89.7	86.3	86.7	58.3	99.0	87.4
CRS MIX #2	91.7	82.7	95.3	91.7	76.7	71.7	99.0	87.0
RESOLUTE (7H7)	81.7	82.7	95.0	91.3	83.3	75.0	99.0	86.9
DLFPS CHCRM	96.0	96.0	88.3	80.0	63.3	82.7	99.0	86.5
DLFPS TFAM	91.0	83.0	53.3	97.7	95.0	82.7	99.0	86.0
CRS MIX #1	89.3	86.0	88.3	85.0	80.0	73.3	99.0	85.9
VITALITY LOW	88.3	92.7	92.0	91.3	60.0	76.7	99.0	85.7
SOUTHERN MIXTURE	51.7	91.3	86.0	96.0	88.3	80.0	99.0	84.6
CS MIX	88.3	92.7	90.7	83.3	53.3	84.0	99.0	84.5
CRS MIX #3	94.3	96.0	87.0	81.3	70.0	62.7	99.0	84.3
SPARTAN II	86.7	84.7	93.0	81.7	71.7	73.3	98.7	84.2
DLFPS TF-A	70.0	93.0	85.3	97.7	95.0	46.7	99.0	83.8
BULLSEYE	87.7	99.0	75.3	90.0	96.3	40.0	98.3	83.8
KINGDOM	73.3	96.3	78.3	94.3	96.3	48.3	99.0	83.7
NORTHERN MIXTURE	58.3	99.0	85.3	91.3	75.0	78.3	98.3	83.7
RADAR	80.0	91.3	86.0	94.7	60.0	72.7	99.0	83.4
QUATRO	65.0	97.7	86.7	71.7	71.7	86.3	98.7	82.5
DLFPS CHCRSH	76.7	96.0	82.7	86.7	66.7	66.0	99.0	82.0
BGR-TF3	66.7	82.7	82.0	94.7	94.7	46.7	99.0	80.9
DTTHO TF/KBG MIX	75.0	94.3	82.0	86.3	91.7	36.7	99.0	80.7
YAAK	41.7	97.7	84.0	96.0	86.7	60.0	99.0	80.7
DTT TALL FESCUE MIX	73.3	89.3	74.3	84.7	95.0	44.3	99.0	80.0
VITALITY DOUBLE	53.3	94.7	81.0	91.3	86.7	53.3	99.0	79.9
CHANTILLY	73.3	99.0	84.0	91.7	58.3	50.0	98.7	79.3
A-SFT	75.0	89.3	70.0	92.7	90.0	36.7	99.0	79.0
KY-31 E+	80.0	94.7	66.0	66.7	96.3	46.7	99.0	78.5
DLFPS SHHM	70.0	92.7	57.7	76.7	71.7	76.7	98.7	77.7
KENBLUE	23.3	90.0	75.7	91.0	80.0	23.3	99.0	68.9
NATURAL KNIT ® PRG MIX	38.3	97.7	63.3	86.7	73.0	20.0	99.0	68.3
DUTCH WHITE CLOVER	12.7	94.7	66.3	85.0	78.3	6.7	98.3	63.1
BEWITCHED	21.7	79.7	74.0	81.3	80.0	6.7	98.3	63.1
LSD VALUE	23.8	21.8	13.2	16.0	16.8	25.1	0.5	7.0
C.V. (%)	21.0	14.7	10.1	11.4	13.0	27.0	0.3	14.1

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 11. TURF UNIFORMITY RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT IN THE U.S.
2020 DATA

TURF UNIFORMITY RATINGS 1-9; 9=COMPLETELY UNIFORM 2/

NAME	IN1
CHANTILLY	7.0
DLFPS CHCRM	7.0
DLFPS CHCRSH	7.0
RADAR	6.7
VITALITY DOUBLE	6.7
BGR-TF3	6.3
MNHD-15	6.3
NORTHERN MIXTURE	6.3
CRS MIX #1	6.0
CS MIX	6.0
KINGDOM	6.0
KY-31 E+	6.0
DLFPS TFAM	5.7
DTT TALL FESCUE MIX	5.7
A-SFT	5.3
DLFPS SHHM	5.3
DLFPS TFASTC	5.3
KENBLUE	5.3
VITALITY LOW	5.3
CRS MIX #2	5.0
DLFPS TF-A	5.0
SOUTHERN MIXTURE	5.0
YAAK	5.0
BULLSEYE	4.7
DTTHO TF/KBG MIX	4.7
NATURAL KNIT ® PRG MIX	4.7
SPARTAN II	4.7
BEWITCHED	4.3
RESOLUTE (7H7)	4.3
CRS MIX #3	3.7
QUATRO	3.7
DUTCH WHITE CLOVER	3.0
LSD VALUE	1.8
C.V. (%)	20.3

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 12. PERCENT WEEDS (SEPTEMBER) RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT IN THE U.S. 2/
2020 DATA

NAME	UT1
DUTCH WHITE CLOVER	43.3
CRS MIX #3	40.0
NATURAL KNIT ® PRG MIX	33.3
SPARTAN II	26.7
BEWITCHED	23.3
MNHD-15	23.3
RESOLUTE (7H7)	20.0
QUATRO	16.7
DLFPS CHCRSH	13.3
DLFPS SHHM	13.3
KENBLUE	13.3
NORTHERN MIXTURE	13.3
A-SFT	10.0
CRS MIX #1	10.0
CRS MIX #2	10.0
DLFPS CHCRM	10.0
DLFPS TFASTC	10.0
SOUTHERN MIXTURE	10.0
CHANTILLY	6.7
VITALITY LOW	6.7
BGR-TF3	3.3
BULLSEYE	3.3
CS MIX	3.3
DLFPS TF-A	3.3
DTT TALL FESCUE MIX	3.3
DTTHO TF/KBG MIX	3.3
KINGDOM	3.3
VITALITY DOUBLE	3.3
DLFPS TFAM	0.0
KY-31 E+	0.0
RADAR	0.0
YAAK	0.0
LSD VALUE	12.9
C.V. (%)	67.7

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 13. PERCENT WEED RATINGS OF COOL-SEASON CULTIVARS GROWN UNDER LOW INPUT AT STORRS, CT 1/ 2020 DATA 2/

NAME	SUMMER	FALL	MEAN
BEWITCHED	86.7	65.0	75.8
KENBLUE	81.7	63.3	72.5
NATURAL KNIT ® PRG MIX	76.7	60.0	68.3
YAAK	70.0	66.7	68.3
DUTCH WHITE CLOVER	65.0	61.7	63.3
QUATRO	80.0	38.3	59.2
NORTHERN MIXTURE	66.7	45.0	55.8
CHANTILLY	66.7	43.3	55.0
DTT TALL FESCUE MIX	61.7	36.7	49.2
KINGDOM	61.7	30.0	45.8
DTTHO TF/KBG MIX	51.7	33.3	42.5
SOUTHERN MIXTURE	48.3	36.7	42.5
RADAR	53.3	30.0	41.7
A-SFT	50.0	25.0	37.5
SPARTAN II	51.7	23.3	37.5
CS MIX	55.0	18.3	36.7
DLFPS TF-A	38.3	31.7	35.0
VITALITY DOUBLE	31.7	30.0	30.8
BGR-TF3	33.3	25.0	29.2
KY-31 E+	45.0	8.3	26.7
DLFPS TFASTC	28.3	21.0	24.7
RESOLUTE (7H7)	18.3	26.7	22.5
VITALITY LOW	25.0	19.3	22.2
CRS MIX #2	31.7	11.7	21.7
CRS MIX #1	30.0	11.7	20.8
DLFPS TFAM	34.3	7.0	20.7
BULLSEYE	25.0	15.0	20.0
DLFPS CHCRSH	31.7	7.7	19.7
DLFPS SHHM	18.3	15.0	16.7
MNHD-15	20.0	6.7	13.3
DLFPS CHCRM	21.7	4.3	13.0
CRS MIX #3	5.3	3.3	4.3
LSD VALUE	31.3	26.2	23.2
C.V. (%)	40.6	54.8	38.6

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 14. PERCENT WEED AND BARE SOIL RATINGS OF COOL-SEASON CULTIVARS GROWN UNDER LOW INPUT AT ST. PAUL, MN 1/ 2020 DATA 2/

NAME	BARE SPOT SPRING	BARE SPOT SUMMER	BARE SPOT FALL	% WEEDS SPRING	% WEEDS SUMMER	% WEEDS FALL	% WEED MEAN
NATURAL KNIT ® PRG MIX	20.0	14.0	13.7	16.3	23.3	23.0	20.9
DLFPS SHHM	28.0	20.3	20.3	14.0	21.7	22.0	19.2
A-SFT	11.7	3.3	8.7	9.3	14.0	21.3	14.9
BEWITCHED	10.3	13.7	13.7	18.3	13.0	12.3	14.6
DTT TALL FESCUE MIX	7.0	4.7	7.3	8.0	11.3	18.3	12.6
BGR-TF3	6.7	2.7	2.7	7.3	11.0	15.3	11.2
DTTHO TF/KBG MIX	8.0	3.3	3.7	6.7	12.0	14.3	11.0
VITALITY DOUBLE	6.0	6.7	8.0	8.7	8.3	11.0	9.3
DLFPS TFAM	38.3	36.7	36.7	7.7	9.7	10.0	9.1
KINGDOM	12.7	6.7	9.3	6.0	7.0	12.3	8.4
KENBLUE	18.3	15.7	15.7	6.3	8.7	8.7	7.9
DUTCH WHITE CLOVER	31.3	28.3	27.3	6.0	8.3	7.0	7.1
DLFPS TF-A	9.0	7.0	7.0	4.0	6.7	7.7	6.1
YAAK	9.3	7.0	9.0	4.0	7.3	7.0	6.1
QUATRO	7.7	7.0	7.3	5.3	6.3	6.0	5.9
DLFPS CHCRM	10.0	7.0	6.0	4.7	6.3	5.7	5.6
DLFPS TFASTC	10.0	8.0	8.7	4.0	5.7	6.3	5.3
SOUTHERN MIXTURE	9.7	7.7	8.0	3.7	6.3	6.0	5.3
KY-31 E+	24.0	22.3	28.7	3.7	4.3	5.3	4.4
BULLSEYE	14.3	13.0	19.0	1.7	3.3	5.7	3.6
MNHD-15	7.0	7.0	6.7	3.0	3.3	3.7	3.3
RESOLUTE (7H7)	3.0	2.3	2.0	3.7	3.3	3.0	3.3
CHANTILLY	14.7	12.3	11.3	1.3	3.7	4.7	3.2
SPARTAN II	6.0	4.7	3.7	2.3	3.7	3.3	3.1
RADAR	13.0	11.3	11.0	2.7	3.3	3.0	3.0
NORTHERN MIXTURE	17.3	16.7	11.3	2.0	3.3	3.3	2.9
CRS MIX #2	6.0	2.0	2.3	2.7	2.7	2.3	2.6
CRS MIX #3	13.3	11.3	10.7	1.7	2.0	2.3	2.0
CS MIX	10.7	9.7	8.0	1.7	2.0	1.3	1.7
CRS MIX #1	11.0	11.3	10.0	1.0	1.3	1.7	1.3
DLFPS CHCRSH	16.7	17.0	16.0	1.3	1.3	1.3	1.3
VITALITY LOW	10.7	8.7	6.7	1.0	1.3	1.3	1.2
LSD VALUE	10.4	10.8	13.2	4.8	8.4	9.3	6.5
C.V. (%)	48.2	59.3	66.7	57.2	69.5	68.6	58.7

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 15. PERCENT WEED RATINGS OF COOL-SEASON CULTIVARS GROWN UNDER LOW INPUT AT RALEIGH, NC 1/ 2020 DATA 2/

NAME	FEBRUARY	MARCH	APRIL	MAY	JUNE	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	% WEEDS MEAN
MNHD-15	35.0	46.7	51.7	50.0	56.7	60.0	80.0	81.3	45.0	56.3
BEWITCHED	60.0	65.0	66.7	55.0	51.7	61.7	68.3	46.7	28.3	55.9
QUATRO	21.7	36.7	46.7	53.3	60.0	61.7	84.7	65.0	30.0	51.1
DUTCH WHITE CLOVER	31.7	43.3	50.0	53.3	63.3	61.7	66.7	58.3	30.0	50.9
NATURAL KNIT ® PRG MIX	30.0	41.7	45.0	45.0	58.3	58.3	76.7	53.3	35.0	49.3
KINGDOM	21.7	28.3	38.3	46.7	55.0	66.7	83.3	45.0	21.7	45.2
DTT TALL FESCUE MIX	18.3	26.7	41.7	48.3	45.0	68.3	80.0	51.7	13.3	43.7
KY-31 E+	11.7	20.0	26.7	26.7	21.7	94.7	96.0	75.0	20.0	43.6
CHANTILLY	31.7	38.3	36.7	41.7	50.0	35.0	53.3	46.7	35.0	40.9
DTTHO TF/KBG MIX	11.7	16.7	31.7	38.3	35.0	63.3	76.3	38.3	15.0	36.3
KENBLUE	20.0	31.7	33.3	35.0	43.3	41.7	51.7	35.0	26.7	35.4
CRS MIX #3	28.3	31.7	36.7	35.0	31.7	28.3	55.0	43.3	20.0	34.4
RESOLUTE (7H7)	21.7	30.0	38.3	41.7	31.7	30.0	48.3	33.3	20.0	32.8
DLFPS CHCRM	21.7	25.0	26.7	25.0	28.3	31.7	58.3	38.3	25.0	31.1
SPARTAN II	23.3	25.0	28.3	28.3	41.7	27.0	51.7	35.0	16.7	30.8
A-SFT	11.7	16.7	23.3	26.7	30.0	56.7	68.3	26.7	16.7	30.7
RADAR	25.0	28.3	31.7	30.0	26.7	30.0	45.0	31.7	28.3	30.7
BULLSEYE	8.3	14.3	18.3	20.0	18.3	71.7	85.0	26.7	12.0	30.5
NORTHERN MIXTURE	25.0	25.0	26.7	23.3	25.0	30.0	50.0	31.7	26.7	29.3
CS MIX	16.7	21.7	26.7	25.0	31.7	35.0	48.3	33.3	17.7	28.4
DLFPS CHCRSH	16.7	21.7	28.3	28.3	25.0	28.3	53.3	31.7	21.7	28.3
BGR-TF3	7.7	13.3	18.3	21.7	23.3	56.7	70.0	30.0	10.0	27.9
VITALITY LOW	18.3	25.0	26.7	25.0	26.7	26.7	48.3	31.7	21.7	27.8
CRS MIX #2	16.7	23.3	33.3	35.0	31.7	21.7	33.3	26.7	16.7	26.5
DLFPS TFASTC	5.3	11.7	21.7	25.0	25.0	48.3	60.0	30.0	11.7	26.5
VITALITY DOUBLE	11.7	15.0	20.0	23.3	23.3	46.7	60.0	23.3	8.7	25.8
SOUTHERN MIXTURE	13.3	20.0	26.7	25.0	25.0	30.0	55.0	31.7	5.0	25.7
CRS MIX #1	16.7	18.3	26.7	23.3	31.7	21.7	41.7	26.7	18.3	25.0
DLFPS SHHM	10.0	11.7	16.7	15.0	33.3	28.3	46.7	24.3	15.0	22.3
DLFPS TF-A	3.7	6.7	15.0	15.0	20.0	38.3	55.0	21.7	5.0	20.0
DLFPS TFAM	5.0	7.0	15.0	13.3	11.7	45.0	60.0	16.7	2.3	19.6
YAAK	1.7	2.7	33.3	11.7	6.7	39.7	30.0	15.0	4.3	16.1
LSD VALUE	21.0	22.2	38.4	22.9	19.4	30.9	35.7	35.3	36.9	21.4
C.V. (%)	61.6	50.9	50.6	39.9	34.5	38.6	29.8	47.2	72.8	33.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 16. PERCENT WEED RATINGS OF COOL-SEASON CULTIVARS GROWN UNDER LOW INPUT AT CORVALLIS, OR 1/ 2020 DATA 2/

NAME	% GRASSY WEEDS	% BROAD LEAF WEEDS	WEEDS MEAN
BEWITCHED	39.0	50.0	44.5
DUTCH WHITE CLOVER	51.0	35.0	43.0
KENBLUE	56.7	28.3	42.5
KINGDOM	15.0	53.3	34.2
DTTHO TF/KBG MIX	15.0	51.7	33.3
MNHD-15	26.7	36.7	31.7
NATURAL KNIT ® PRG MIX	16.7	43.3	30.0
BULLSEYE	5.0	46.7	25.8
CHANTILLY	15.0	36.7	25.8
CRS MIX #3	41.7	8.3	25.0
BGR-TF3	8.3	38.3	23.3
KY-31 E+	9.0	33.3	21.2
DLFPS SHHM	28.3	13.3	20.8
A-SFT	6.7	33.3	20.0
DLFPS TF-A	1.7	33.3	17.5
YAAK	23.3	11.7	17.5
DLFPS CHCRSH	4.3	29.0	16.7
DTT TALL FESCUE MIX	6.7	26.7	16.7
RESOLUTE (7H7)	16.7	16.7	16.7
CRS MIX #1	8.3	23.3	15.8
CRS MIX #2	18.3	11.7	15.0
SPARTAN II	13.3	16.7	15.0
CS MIX	5.0	21.7	13.3
SOUTHERN MIXTURE	1.7	25.0	13.3
VITALITY DOUBLE	1.7	23.3	12.5
NORTHERN MIXTURE	6.7	16.7	11.7
RADAR	5.0	18.3	11.7
QUATRO	6.7	15.0	10.8
VITALITY LOW	11.7	10.0	10.8
DLFPS CHCRM	5.7	15.7	10.7
DLFPS TFAM	1.7	15.0	8.3
DLFPS TFASTC	5.0	5.0	5.0
LSD VALUE	16.5	32.6	15.4
C.V. (%)	69.2	60.3	44.0

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 17. PERCENT PLANTED SPECIES AND WEEDS RATINGS OF COOL-SEASON CULTIVARS AT KENNETT SQUARE, PA 1/ 2020 DATA 2/

NAME	GRASSY + BROADLEAF WEEDS	PLANTED SPECIES
DLFPS CHCRM	56.7	43.3
VITALITY LOW	58.3	41.7
NORTHERN MIXTURE	61.7	38.3
BGR-TF3	60.0	35.0
BULLSEYE	66.7	33.3
DLFPS CHCRSH	68.3	31.7
CRS MIX #2	70.0	30.0
DLFPS TF-A	70.0	30.0
NATURAL KNIT ® PRG MIX	70.0	30.0
SOUTHERN MIXTURE	70.0	30.0
SPARTAN II	70.0	30.0
A-SFT	71.7	28.3
KY-31 E+	73.3	26.7
QUATRO	73.3	26.7
CRS MIX #3	75.0	25.0
DLFPS TFASTC	75.0	25.0
KENBLUE	75.0	25.0
VITALITY DOUBLE	75.0	25.0
MNHD-15	76.7	23.3
CRS MIX #1	78.3	21.7
DUTCH WHITE CLOVER	78.3	21.7
DLFPS TFAM	81.7	18.3
KINGDOM	83.3	16.7
DTT TALL FESCUE MIX	85.0	15.0
RADAR	85.0	15.0
CHANTILLY	86.7	13.3
BEWITCHED	91.7	11.7
DLFPS SHHM	88.3	11.7
DTTHO TF/KBG MIX	88.3	11.7
RESOLUTE (7H7)	88.3	11.7
CS MIX	90.0	10.0
YAAK	90.0	10.0
LSD VALUE	30.6	34.9
C.V. (%)	17.1	56.3

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 18. PERCENT COVER OF PLANTED SPECIES AND WEED RATINGS OF COOL-SEASON CULTIVARS AT BLACKSBURG, VA 1/
2020 DATA 2/

NAME	PERCENT WEEDS SPRING	PERCENT WEEDS FALL	PLANTED SPECIES SPRING	PLANTED SPECIES FALL
BGR-TF3	5.0	5.0	95.0	95.0
BULLSEYE	7.3	5.0	92.7	95.0
DLFPS TFAM	10.0	6.7	90.0	93.3
VITALITY DOUBLE	10.0	6.7	90.0	93.3
DLFPS TF-A	5.7	8.3	94.3	91.7
KY-31 E+	5.0	8.3	95.0	91.7
MNHD-15	6.7	8.3	93.3	91.7
SPARTAN II	8.3	8.3	91.7	91.7
A-SFT	9.0	10.0	91.0	90.0
CRS MIX #2	8.3	10.0	91.7	90.0
CRS MIX #3	8.3	10.0	91.3	90.0
DTT TALL FESCUE MIX	10.0	10.0	90.0	90.0
SOUTHERN MIXTURE	6.7	10.0	93.3	90.0
DLFPS CHCRM	8.3	11.7	91.7	88.3
DLFPS TFASTC	11.7	11.7	88.3	88.3
DTTHO TF/KBG MIX	8.3	11.7	91.7	88.3
KINGDOM	11.7	11.7	88.3	88.3
CRS MIX #1	16.7	13.3	83.3	86.7
NORTHERN MIXTURE	8.3	13.3	91.7	86.7
DLFPS CHCRSH	11.7	15.0	88.3	85.0
DLFPS SHHM	20.0	15.0	80.0	85.0
RADAR	11.7	15.0	88.3	85.0
RESOLUTE (7H7)	21.7	15.0	78.3	85.0
VITALITY LOW	13.3	15.0	86.3	85.0
CHANTILLY	15.0	16.7	84.7	83.3
QUATRO	16.7	16.7	83.3	83.3
CS MIX	16.7	18.3	83.3	81.7
KENBLUE	20.0	20.0	80.0	80.0
BEWITCHED	30.0	30.0	70.0	70.0
NATURAL KNIT ® PRG MIX	33.3	31.7	66.7	68.3
YAAK	46.7	38.3	53.3	61.7
DUTCH WHITE CLOVER	60.0	46.7	40.0	53.3
LSD VALUE	14.1	10.0	14.0	10.0
C.V. (%)	58.6	42.9	10.3	7.4

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

APPENDIX TABLE. SUMMARY OF TURFGRASS QUALITY RATINGS FOR COOL-SEASON CULTIVARS GROWN UNDER LOW INPUT 2020 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	QUALITY MEAN 1/	MAXIMUM IN TOP 25% 2/
A-SFT	4.4	18.2
BEWITCHED	3.3	9.1
BGR-TF3	4.4	18.2
BULLSEYE	4.7	63.6
CHANTILLY	4.3	18.2
CRS MIX #1	4.5	27.3
CRS MIX #2	4.6	36.4
CRS MIX #3	4.1	18.2
CS MIX	4.4	27.3
DLFPS CHCRM	4.5	54.5
DLFPS CHCRSH	4.5	27.3
DLFPS SHHM	3.8	0.0
DLFPS TF-A	4.6	36.4
DLFPS TFAM	4.5	36.4
DLFPS TFASTC	4.8	54.5
DTT TALL FESCUE MIX	4.3	18.2
DTTHO TF/KBG MIX	4.2	18.2
DUTCH WHITE CLOVER	3.1	0.0
KENBLUE	3.5	0.0
KINGDOM	4.3	18.2
KY-31 E+	4.3	18.2
MNHD-15	4.6	27.3
NATURAL KNIT ® PRG MIX	3.7	27.3
NORTHERN MIXTURE	4.3	27.3
QUATRO	4.0	18.2
RADAR	4.4	27.3
RESOLUTE (7H7)	4.4	27.3
SOUTHERN MIXTURE	4.4	0.0
SPARTAN II	4.2	18.2
VITALITY DOUBLE	4.6	36.4
VITALITY LOW	4.5	36.4
YAAK	4.2	18.2
LSD VALUE	0.3	
C.V. (%)	14.5	

*/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).
**/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.
1/ MEAN AN AVERAGE OF ALL THE TURFGRASS QUALITY RATINGS FROM ALL LOCATIONS.
2/ MAXIMUM IN TOP 25%. THE PERCENTAGE OF LOCATIONS WHERE THAT ENTRY FINISHED IN THE TOP 25% OF ALL ENTRIES.