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. 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 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. Aaron Kuenzi, Mountain View Seeds
Mr. Ryan Jeffries, Columbia Seeds, Inc.
Dr. Mike Kenna, USGA Green Section
Dr. Charles Fontanier, Oklahoma State University
Dr. Alec Kowalewski, Oregon State University
Mr. Mike Selman, Buena Vista Turf Farm
Mr. Mark Johnson, Golf Course Superintendents Assoc. of America
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A Guide to NTEP Turfgrass Ratings

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*.

State	Location	Code
Connecticut	Storrs	CT1
Connecticut	Storrs	CT2
Indiana	West Lafayette	IN1
Indiana	West Lafayette (Medium Input)	IN2
Maryland	College Park	MD1
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

2015 National Low Input Cool-Season Test
Entries and Sponsors

Entry No.	Name	Species/Composition	Sponsor
*18	Ky-31 E+	100% Ky-31 tall fescue w/endophyte	Standard entry
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 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 2019

TABLE A. 2018 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	2.1-3.0	FULL SUN	-	-
MD1	SILT LOAM AND SILT	6.1-6.5	61-150	151-240	0.0-1.0	FULL SUN	3.6-4.0	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	6.6-7.0	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 2018

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	FALL DENSITY
CT1					X	X	X	X	X	X			X	
CT2					X	X	X	X	X	X			X	
IN1					X	X	X	X	X	X				X
IN2					X	X	X	X	X	X				X
MD1		X			X	X	X	X	X		X			
MI1					X	X	X	X	X	X			X	
MN1					X	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		X	
NE1					X	X	X	X	X	X				X
OR1				X	X	X	X	X	X	X	X	X		
PA2			X	X	X	X		X		X	X			
UT1				X	X	X	X	X	X	X				
VA1					X	X	X	X	X	X				

LOCATION	PERCENT COVER SPRING	PERCENT COVER SUMMER	PERCENT COVER FALL	PERCENT WEEDS	PERCENT BARE SOIL	PERCENT WEED RATINGS JUNE	JULY	AUGUST	OCTOBER	PERCENT WEED RATINGS SPRING	SUMMER	FALL
CT1			X				X		X			
CT2			X				X		X			
IN1												
IN2												
MD1	X											
MI1		X	X	X								
MN1			X	X	X							
MO1	X			X								
MO2	X			X								
NC1			X			X		X				
NE1	X		X								X	X
OR1			X								X	X
PA2			X								X	
UT1												
VA1	X		X							X		X

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TABLE 1.              MEAN TURFGRASS QUALITY RATINGS OF COOL-SEASON CULTIVARS GROWN UNDER   1/
                         LOW INPUT IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1  **/
                                            2018 DATA
                         TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF  2/


NAME                      # ENTRY    CT1    PA1    MD1    VA1    NC1    MI1    MO1    NE1    MEAN

  DLFPS TFAM                 9       7.1    3.7    4.5    7.6    6.1    6.2    6.1    4.4    5.9
  DLFPS TFASTC              14       6.2    3.7    4.6    7.5    4.7    5.6    5.6    4.4    5.4
  CRS MIX #3                21       6.3    3.0    5.6    7.3    5.0    5.4    5.2    4.1    5.4
  VITALITY DOUBLE           11       5.7    4.0    4.4    7.3    4.4    5.9    5.6    4.7    5.3
  DLFPS TF-A                 6       5.7    3.8    4.3    7.2    4.4    5.7    5.5    4.6    5.2
  CRS MIX #1                19       5.6    3.5    5.7    7.5    3.7    5.2    5.1    4.5    5.2
 *BULLSEYE                   2       5.4    3.9    3.8    7.0    4.4    5.9    5.5    4.6    5.1
  CRS MIX #2                20       5.3    3.6    5.9    7.3    3.7    5.4    5.0    4.8    5.1
  BGR-TF3                    4       5.2    3.6    4.2    7.0    3.8    5.4    5.2    4.4    4.9
  VITALITY LOW              10       5.3    3.3    5.0    7.2    3.4    4.9    4.9    4.2    4.9
  MNHD-15                    5       5.0    3.4    5.4    7.2    3.1    5.0    4.8    4.5    4.8
 *SPARTAN II                16       4.9    3.4    5.0    6.9    3.5    5.3    4.8    4.6    4.8
 *RESOLUTE (7H7)            26       4.9    3.5    4.9    7.0    3.2    5.1    4.8    4.5    4.8
  DLFPS CHCRM                7       4.9    3.4    4.4    6.8    3.5    5.2    4.9    4.3    4.7
  SOUTHERN MIXTURE          28       4.9    3.6    3.9    6.8    3.5    5.3    5.1    4.4    4.7
  DLFPS SHHM                 8       4.9    3.0    4.0    6.3    4.1    5.3    4.7    4.0    4.6
  DTTHO TF/KBG MIX          23       4.2    3.9    3.4    6.5    3.2    5.6    5.0    4.7    4.6
 *RADAR                     31       4.5    3.4    4.6    6.9    2.7    4.8    4.7    4.3    4.5
  DTT TALL FESCUE MIX       22       4.8    3.4    3.5    6.7    3.2    5.0    4.9    4.1    4.5
 *CS MIX                    29       5.0    3.1    4.3    6.9    2.9    4.6    4.7    3.8    4.5
  A-SFT                     24       4.4    3.6    3.4    6.5    3.2    5.3    4.9    4.3    4.4
  DLFPS CHCRSH              15       4.3    3.4    4.4    6.6    2.7    5.0    4.6    4.4    4.4
 *YAAK                      30       4.8    3.4    2.9    6.6    3.0    4.8    4.9    3.7    4.3
 *KY-31 E+                  18       4.0    3.6    2.8    6.1    3.2    5.5    4.8    4.4    4.3
 *KINGDOM                   25       4.4    3.3    2.9    6.4    2.9    4.9    4.8    3.8    4.2
 *CHANTILLY                 12       3.9    3.3    4.2    6.4    2.3    4.8    4.3    4.3    4.2
  NORTHERN MIXTURE          27       3.8    3.4    3.8    6.3    2.4    4.9    4.4    4.3    4.1
 *QUATRO                    17       4.0    3.0    3.6    6.0    3.0    4.9    4.3    4.0    4.1
 *KENBLUE                   32       3.0    3.7    3.3    5.7    2.5    5.5    4.3    4.9    4.0
 *BEWITCHED                  3       2.6    3.1    2.3    5.1    2.3    5.1    3.9    4.2    3.5
 *NATURAL KNIT ® PRG MIX     1       2.4    2.8    1.7    4.8    1.9    4.6    3.7    3.7    3.1
 *DUTCH WHITE CLOVER        13       1.4    2.9    2.0    4.2    1.7    5.1    3.3    4.4    3.0

 LSD VALUE                          0.9    0.9    0.9    0.9    0.9    0.9    0.9    0.9    0.9
 C.V. (%)                          12.5   16.9   14.5    8.8   17.3   11.1   12.1   13.4   12.7
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*/ COMMERCIALLY AVAILABLE IN THE USA IN 2018.

**/ 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.

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                    TABLE 2.    MEAN TURFGRASS QUALITY RATINGS OF COOL-SEASON CULTIVARS GROWN UNDER   1/
                             LOW INPUT IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2  */
                                              2018 DATA
                             TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF  2/


            NAME                           # ENTRY     IN1       MN1       UT1       OR1       MEAN


            YAAK                              30        7.2       3.7       4.4       4.6       5.0
            VITALITY DOUBLE                   11        6.8       3.6       3.7       4.4       4.6
            DTTHO TF/KBG MIX                  23        6.8       3.6       3.8       4.3       4.6
            KINGDOM                           25        6.8       3.4       3.9       4.3       4.6
            RADAR                             31        6.5       5.1       3.0       3.7       4.6
            DTT TALL FESCUE MIX               22        6.7       3.7       3.7       4.2       4.6
            SOUTHERN MIXTURE                  28        6.6       3.6       3.5       4.1       4.5
            DLFPS TFASTC                      14        6.6       3.4       3.5       4.3       4.5
            CS MIX                            29        6.4       4.6       3.0       3.8       4.4
            VITALITY LOW                      10        6.3       4.8       2.8       3.7       4.4
            DLFPS TF-A                          6        6.6       3.2       3.5       4.3       4.4
            CRS MIX #1                        19        6.2       5.1       2.5       3.6       4.4
            A-SFT                             24        6.5       3.3       3.5       4.0       4.3
            BULLSEYE                           2        6.6       2.7       3.7       4.4       4.3
            BGR-TF3                            4        6.4       3.5       3.3       4.0       4.3
            MNHD-15                            5        6.2       5.3       2.4       3.4       4.3
            RESOLUTE (7H7)                    26        6.2       4.6       2.6       3.6       4.3
            DLFPS CHCRSH                      15        6.2       4.6       2.7       3.5       4.2
            NORTHERN MIXTURE                  27        6.3       4.2       2.9       3.5       4.2
            CHANTILLY                         12        6.1       4.7       2.5       3.3       4.1
            DLFPS CHCRM                         7        6.1       3.8       2.7       3.6       4.1
            KY-31 E+                          18        6.3       2.4       3.4       3.9       4.0
            CRS MIX #2                        20        5.8       4.8       2.0       3.2       4.0
            SPARTAN II                        16        5.8       4.0       2.2       3.2       3.8
            DLFPS TFAM                          9        5.9       1.3       3.3       4.2       3.7
            KENBLUE                           32        5.7       2.9       2.4       3.1       3.5
            QUATRO                            17        5.3       2.5       2.0       2.9       3.2
            BEWITCHED                          3        5.2       1.7       2.1       2.8       2.9
            CRS MIX #3                        21        4.9       2.6       1.4       2.8       2.9
            NATURAL KNIT ® PRG MIX             1        5.2       1.5       2.2       2.7       2.9
            DLFPS SHHM                          8        4.9       1.7       1.7       2.8       2.8
            DUTCH WHITE CLOVER                13        4.1       0.7       0.8       1.6       1.8


            LSD VALUE                                   0.9       0.9       0.9       0.9       0.9
            C.V. (%)                                    9.5      16.8      20.4      16.0      14.5
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    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 GROWN
UNDER LOW INPUT WITH INITIAL ANNUAL GRASS PRE-EMERGENCE AT STORRS, CT   1/
2018 DATA

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

	PERCENT GROUND COVER	PERCENT WEEDS		QUALITY RATINGS						
NAME	SPRING GREENUP	FALL	SUMMER	FALL	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
CRS MIX #3	5.0	92.7	1.0	10.0	6.0	7.3	7.7	6.3	7.0	7.0	6.9
DLFPS TFAM	3.3	96.0	3.0	20.0	6.7	7.7	6.7	5.7	6.3	6.3	6.6
DLFPS TFASTC	4.3	96.0	20.7	33.3	6.7	6.0	5.7	6.0	6.3	6.3	6.2
VITALITY LOW	5.0	91.7	5.7	40.0	5.3	6.7	6.0	5.7	5.7	6.0	5.9
CS MIX	6.0	84.3	23.7	43.3	5.7	6.3	5.7	5.3	5.3	6.3	5.8
BULLSEYE	4.0	94.3	26.7	28.3	5.7	6.0	4.7	6.0	5.7	6.0	5.7
DLFPS SHHM	5.3	58.3	4.0	36.7	5.3	6.3	6.3	5.7	5.3	5.0	5.7
DLFPS CHCRM	7.3	88.3	2.7	46.7	6.3	6.0	5.3	5.7	5.0	5.3	5.6
RADAR	7.0	85.0	13.3	46.7	5.7	6.0	5.3	4.7	5.3	5.7	5.4
MNHD-15	5.7	75.0	23.3	58.3	4.3	6.3	5.7	5.3	4.7	5.7	5.3
SPARTAN II	6.0	78.3	9.3	53.3	5.7	6.0	5.7	5.3	4.3	5.0	5.3
CRS MIX #1	6.0	81.3	20.7	58.3	5.3	5.0	5.7	5.7	3.7	5.7	5.2
VITALITY DOUBLE	3.7	93.3	33.3	50.0	5.7	4.7	6.0	4.3	4.3	6.0	5.2
DLFPS TF-A	4.0	94.3	23.3	50.0	4.7	5.0	5.0	5.0	4.3	6.0	5.0
CRS MIX #2	5.0	89.3	39.0	61.7	5.3	5.0	5.7	5.3	3.3	5.0	4.9
KINGDOM	4.0	90.0	43.3	66.7	5.0	4.3	4.7	4.7	4.7	5.7	4.8
DLFPS CHCRSH	6.0	66.7	20.7	85.0	5.7	5.0	5.3	3.7	2.7	5.7	4.7
SOUTHERN MIXTURE	4.3	85.0	48.3	83.3	6.0	5.3	4.7	3.3	4.0	4.3	4.6
DTT TALL FESCUE MIX	4.3	88.3	41.7	80.0	4.0	4.7	4.3	4.3	4.0	5.3	4.4
BGR-TF3	4.3	93.0	50.0	61.7	4.0	4.7	3.3	3.7	4.0	6.0	4.3
A-SFT	4.3	86.7	40.0	81.7	4.0	4.7	4.7	4.0	2.7	5.3	4.2
DTTHO TF/KBG MIX	4.0	80.0	56.7	83.3	4.0	4.0	4.3	3.7	3.7	5.3	4.2
RESOLUTE (7H7)	6.3	56.7	48.3	85.0	4.7	4.3	4.3	5.0	3.0	4.0	4.2
CHANTILLY	7.3	51.7	30.0	81.7	4.3	4.3	4.3	3.7	4.0	4.0	4.1
YAAK	3.0	43.3	30.0	73.3	5.7	5.3	3.0	4.0	3.0	3.7	4.1
KY-31 E+	3.0	66.7	55.0	66.7	5.3	4.0	3.7	4.3	3.0	3.7	4.0
NORTHERN MIXTURE	7.0	66.7	53.3	80.0	5.3	4.0	3.3	3.3	2.3	2.3	3.4
QUATRO	5.0	33.3	51.7	70.0	4.0	3.7	4.7	2.7	2.3	2.3	3.3
BEWITCHED	7.3	76.7	86.7	81.7	3.0	2.7	2.7	3.3	3.0	3.0	2.9
NATURAL KNIT ® PRG MIX	5.7	56.7	48.3	83.3	2.7	4.3	2.3	2.0	2.7	2.7	2.8
KENBLUE	6.7	11.7	91.7	95.7	2.7	2.0	2.0	1.7	1.3	1.3	1.8
DUTCH WHITE CLOVER	2.0	0.7	91.7	95.7	1.0	1.7	1.0	1.0	1.0	1.0	1.1
LSD VALUE	1.3	19.1	28.7	35.1	1.7	1.4	1.7	1.5	2.1	1.4	1.0
C.V. (%)	16.4	17.2	50.4	32.8	20.8	17.9	22.3	21.5	31.7	18.8	13.7

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 4.   MEAN TURFGRASS QUALITY AND OTHER RATINGS OF COOL-SEASON CULTIVARS GROWN
             WITH ADDITIONAL FERTILIZER (MEDIUM INPUT)AT WEST LAFAYETTE, IN 1/
             2018 DATA

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

NAME	FALL DENSITY	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
			QUALITY RATINGS					
A-SFT	7.3	6.7	7.3	7.0	7.7	7.0	7.0	7.1
BGR-TF3	7.3	7.0	7.3	7.0	7.3	7.3	6.7	7.1
DLFPS TF-A	7.7	7.0	6.7	7.3	7.3	7.3	6.7	7.1
DTTHO TF/KBG MIX	6.7	7.0	7.0	7.0	7.0	7.7	7.0	7.1
BULLSEYE	6.7	7.0	6.7	7.0	7.3	7.0	6.7	6.9
DTT TALL FESCUE MIX	7.7	7.0	6.7	6.3	7.7	7.3	6.7	6.9
KINGDOM	7.3	7.0	6.3	6.7	7.3	7.3	6.0	6.8
VITALITY DOUBLE	7.3	6.7	6.7	7.0	6.7	7.0	6.7	6.8
DLFPS TFAM	7.0	6.0	6.0	7.0	7.3	7.3	6.7	6.7
DLFPS TFASTC	8.0	6.7	6.3	6.3	6.7	7.3	7.0	6.7
YAAK	7.0	7.0	6.0	7.0	6.7	7.0	6.3	6.7
VITALITY LOW	6.3	6.7	6.3	6.7	7.0	6.7	6.3	6.6
SOUTHERN MIXTURE	7.3	7.0	6.3	6.7	7.3	6.7	5.0	6.5
DLFPS CHCRSH	5.7	6.7	6.7	5.7	6.0	6.0	6.7	6.3
NORTHERN MIXTURE	5.7	6.0	6.0	6.7	6.3	6.3	6.3	6.3
CHANTILLY	5.7	7.0	6.7	6.3	6.0	5.3	6.0	6.2
RADAR	5.0	6.7	6.3	6.3	6.0	5.3	6.7	6.2
BEWITCHED	6.0	6.0	6.3	6.0	5.7	6.0	6.7	6.1
KY-31 E+	6.7	5.3	5.3	6.3	7.0	7.0	5.7	6.1
CRS MIX #2	6.0	5.3	6.0	6.7	6.7	5.7	5.3	5.9
KENBLUE	5.7	5.0	6.0	6.3	6.0	5.7	6.7	5.9
MNHD-15	5.3	5.7	6.3	6.0	6.0	5.0	6.3	5.9
RESOLUTE (7H7)	5.3	5.7	5.3	6.0	6.3	5.7	6.7	5.9
CS MIX	5.7	6.3	6.0	6.0	5.7	5.7	5.0	5.8
DLFPS CHCRM	5.3	5.7	5.7	6.0	6.0	5.7	5.7	5.8
NATURAL KNIT ® PRG MIX	5.7	5.3	5.3	5.7	5.3	5.3	5.7	5.4
SPARTAN II	5.7	5.7	5.0	5.3	6.0	5.3	5.3	5.4
CRS MIX #1	5.3	4.7	4.7	5.3	5.7	5.0	6.0	5.2
QUATRO	4.0	5.0	5.0	5.3	5.3	4.0	5.0	4.9
DUTCH WHITE CLOVER	5.3	4.3	3.0	4.3	4.3	4.7	5.3	4.3
DLFPS SHHM	2.7	3.7	3.0	3.7	4.0	4.3	5.3	4.0
CRS MIX #3	2.7	3.3	2.7	2.7	3.7	3.3	5.0	3.4
LSD VALUE	1.3	0.8	0.9	0.8	1.1	1.1	4.5	0.6
C.V. (%)	13.6	9.2	10.4	9.1	11.1	11.7	20.3	7.1

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.

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TABLE 5.                MEAN TURFGRASS QUALITY AND OTHER RATINGS OF COOL-SEASON CULTIVARS GROWN
                        UNDER LOW INPUT WITH INITIAL ANNUAL GRASS PRE-EMERGENCE AT COLUMBIA, MO  1/
                                              2018 DATA

                             TURFGRASS QUALITY AND OTHER RATINGS 1-9;  9=BEST  2/
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	PERCENT GROUND COVER SPRING	PERCENT WEEDS SPRING	QUALITY RATINGS							
NAME			APR	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
DLFPS TFAM	91.7	13.3	6.7	6.7	6.3	6.7	6.0	6.0	5.7	6.3
DLFPS TFASTC	86.7	15.0	6.0	6.7	6.0	6.0	6.7	6.0	6.0	6.2
DLFPS TF-A	85.0	18.3	6.0	6.0	6.0	6.0	6.3	6.0	6.3	6.1
DTTHO TF/KBG MIX	83.3	18.3	5.0	6.0	6.7	6.3	6.3	6.3	6.3	6.1
VITALITY DOUBLE	83.3	20.0	5.3	6.0	6.0	6.7	6.7	6.0	6.3	6.1
SOUTHERN MIXTURE	91.7	11.7	6.3	6.3	5.7	5.7	5.3	5.3	5.7	5.8
MNHD-15	83.3	16.7	5.7	5.7	6.0	6.3	5.3	5.3	5.0	5.6
DTT TALL FESCUE MIX	83.3	25.0	5.0	5.3	5.7	5.3	6.0	5.7	5.7	5.5
A-SFT	80.0	21.7	4.7	5.0	5.0	5.3	5.7	5.7	5.7	5.3
BULLSEYE	83.3	18.3	5.3	5.7	5.0	5.3	5.3	5.3	5.0	5.3
KINGDOM	78.3	21.7	5.0	5.7	5.3	5.7	5.3	5.3	4.7	5.3
SPARTAN II	86.7	16.7	5.7	5.7	5.0	5.3	5.0	5.0	5.7	5.3
BGR-TF3	80.0	26.7	5.0	5.3	5.0	5.3	5.0	5.3	5.3	5.2
RESOLUTE (7H7)	85.0	13.3	5.3	5.7	5.3	5.0	4.7	5.0	5.0	5.1
CRS MIX #1	90.0	10.0	6.3	7.0	5.7	4.3	4.0	3.7	4.0	5.0
CRS MIX #2	94.3	10.0	7.0	6.3	5.0	4.3	4.0	4.0	4.0	5.0
KENBLUE	73.3	30.0	4.3	4.3	4.3	5.0	5.7	5.7	5.7	5.0
KY-31 E+	81.7	16.7	5.0	5.0	4.7	5.0	5.3	5.3	5.0	5.0
VITALITY LOW	95.0	6.7	7.7	6.7	5.7	4.7	3.3	3.3	3.3	5.0
YAAK	85.0	8.3	5.3	4.7	4.7	4.7	5.0	5.0	5.0	4.9
BEWITCHED	70.0	30.0	3.7	4.3	4.0	4.7	5.7	5.3	5.7	4.8
CRS MIX #3	75.0	21.7	4.3	5.0	4.7	4.7	5.0	5.0	5.0	4.8
DLFPS SHHM	78.3	25.0	4.7	5.0	4.3	4.3	5.0	5.0	5.0	4.8
NORTHERN MIXTURE	83.3	16.7	5.0	5.0	5.0	4.3	4.3	4.0	4.0	4.5
CS MIX	90.0	15.0	6.0	6.0	4.7	4.0	3.7	3.0	3.0	4.3
DLFPS CHCRM	93.3	8.3	6.7	6.0	5.0	4.0	3.0	2.7	2.7	4.3
DLFPS CHCRSH	85.0	13.3	5.3	5.3	4.7	4.0	3.7	3.3	3.0	4.2
RADAR	91.7	8.3	7.0	6.3	4.7	3.7	3.0	2.3	2.3	4.2
CHANTILLY	85.0	15.0	5.0	5.3	4.3	3.3	3.0	3.0	3.0	3.9
QUATRO	65.0	30.0	3.7	3.0	3.7	3.7	4.0	4.3	4.3	3.8
NATURAL KNIT ® PRG MIX	51.7	43.3	3.0	3.7	3.0	3.0	2.7	2.7	2.7	3.0
DUTCH WHITE CLOVER	48.3	51.7	2.0	2.3	2.0	2.0	2.0	2.3	2.3	2.1
LSD VALUE	9.4	9.6	0.9	0.9	0.8	1.1	0.9	1.2	1.2	0.6
C.V. (%)	7.5	32.1	11.3	11.2	10.3	14.3	12.7	16.2	16.8	8.6

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.

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            TABLE 6.    SPRING GREENUP RATINGS OF COOL-SEASON CULTIVARS  1/
                          GROWN UNDER LOW INPUT IN THE U.S.
                                    2018 DATA

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

        NAME                        CT1     MI1     NC1     NE1     MEAN

        DLFPS CHCRM                 7.3     6.0     6.7     4.7     6.2
        DLFPS TFAM                  5.3     6.7     7.7     4.3     6.0
        YAAK                        3.3     8.3     5.0     4.7     5.3
        SOUTHERN MIXTURE            5.0     4.7     6.7     4.7     5.3
        CHANTILLY                   7.3     3.7     6.0     4.0     5.3
        RADAR                       7.3     3.7     5.7     4.3     5.3
        BULLSEYE                    4.7     5.0     6.3     4.7     5.2
        NORTHERN MIXTURE            5.3     4.3     7.0     4.0     5.2
        BGR-TF3                     3.7     4.7     6.3     5.7     5.1
        DLFPS TFASTC                3.7     5.7     6.0     5.0     5.1
        VITALITY DOUBLE             3.3     5.0     7.0     5.0     5.1
        NATURAL KNIT ® PRG MIX      6.3     5.3     3.0     5.3     5.0
        A-SFT                       4.7     5.0     5.0     4.7     4.8
        DLFPS CHCRSH                5.3     3.0     7.0     4.0     4.8
        DTT TALL FESCUE MIX         4.3     5.0     4.7     5.3     4.8
        KINGDOM                     3.7     5.0     5.3     5.0     4.8
        KENBLUE                     4.7     4.0     5.0     5.0     4.7
        QUATRO                      5.7     3.0     4.7     5.3     4.7
        CRS MIX #3                  6.7     3.3     4.3     4.3     4.7
        VITALITY LOW                5.3     3.3     5.3     4.3     4.6
        SPARTAN II                  6.7     3.0     4.3     3.7     4.4
        CS MIX                      5.3     3.0     4.3     5.0     4.4
        DLFPS SHHM                  6.0     3.7     3.7     4.3     4.4
        DLFPS TF-A                  2.7     4.7     5.7     4.3     4.3
        KY-31 E+                    3.0     4.7     4.3     5.0     4.3
        BEWITCHED                   5.0     4.7     3.0     4.0     4.2
        CRS MIX #2                  5.7     3.0     3.3     4.7     4.2
        MNHD-15                     5.0     3.0     3.3     5.0     4.1
        RESOLUTE (7H7)              5.7     3.3     2.3     5.0     4.1
        CRS MIX #1                  6.0     2.0     3.0     4.7     3.9
        DTTHO TF/KBG MIX            3.0     5.0     3.3     4.0     3.8
        DUTCH WHITE CLOVER          2.3     5.0     2.7     4.3     3.6


        LSD VALUE                   1.6     1.0     2.3     1.1     0.8
        C.V. (%)                   19.9    13.6    28.4    15.4    20.6
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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.   FALL DENSITY RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT IN THE U.S.
2018 DATA

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

NAME	IN1
DTT TALL FESCUE MIX	8.0
A-SFT	7.7
BGR-TF3	7.7
DLFPS TFASTC	7.7
DTTHO TF/KBG MIX	7.7
KINGDOM	7.7
BULLSEYE	7.3
DLFPS TF-A	7.3
DLFPS TFAM	7.3
VITALITY DOUBLE	7.3
KY-31 E+	7.0
SOUTHERN MIXTURE	7.0
CRS MIX #2	6.7
CS MIX	6.7
NORTHERN MIXTURE	6.7
RADAR	6.7
RESOLUTE (7H7)	6.7
YAAK	6.7
CHANTILLY	6.3
CRS MIX #1	6.3
DLFPS CHCRM	6.3
KENBLUE	6.3
MNHD-15	6.3
VITALITY LOW	6.3
DLFPS CHCRSH	6.0
BEWITCHED	5.7
NATURAL KNIT ® PRG MIX	5.7
SPARTAN II	5.7
QUATRO	5.3
DLFPS SHHM	4.0
CRS MIX #3	3.7
DUTCH WHITE CLOVER	2.3
LSD VALUE	1.2
C.V. (%)	11.7

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.

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/

NAME	MD1	MO1	NE1	VA1	MEAN
CRS MIX #1	97.7	91.7	90.0	99.0	94.6
VITALITY LOW	94.7	91.7	90.0	99.0	93.8
RADAR	96.3	91.7	86.7	99.0	93.4
DLFPS CHCRM	93.3	90.0	90.0	99.0	93.1
CRS MIX #2	96.3	86.7	90.0	99.0	93.0
DLFPS TF-A	86.7	91.7	90.0	99.0	91.8
CRS MIX #3	93.3	83.3	90.0	99.0	91.4
DLFPS TFAM	90.0	90.0	83.3	99.0	90.6
RESOLUTE (7H7)	90.0	83.3	90.0	99.0	90.6
CHANTILLY	93.3	81.7	90.0	96.0	90.3
VITALITY DOUBLE	90.0	85.0	86.7	99.0	90.2
DLFPS CHCRSH	93.3	85.0	83.3	99.0	90.2
SOUTHERN MIXTURE	88.3	83.3	90.0	99.0	90.2
CS MIX	91.7	80.0	90.0	98.3	90.0
NORTHERN MIXTURE	93.3	78.3	86.7	99.0	89.3
DLFPS TFASTC	88.3	81.7	86.7	99.0	88.9
DTTHO TF/KBG MIX	81.7	85.0	90.0	99.0	88.9
MNHD-15	96.3	70.0	90.0	99.0	88.8
DTT TALL FESCUE MIX	81.7	83.3	90.0	99.0	88.5
BGR-TF3	86.7	83.3	83.3	99.0	88.1
SPARTAN II	93.3	76.7	83.3	99.0	88.1
YAAK	81.7	81.7	86.7	99.0	87.3
BULLSEYE	73.3	85.0	90.0	99.0	86.8
KY-31 E+	73.3	81.7	90.0	99.0	86.0
KENBLUE	81.7	70.0	90.0	97.7	84.8
QUATRO	81.7	68.3	90.0	99.0	84.8
DLFPS SHHM	93.3	65.0	73.3	96.0	81.9
A-SFT	55.0	81.7	90.0	99.0	81.4
KINGDOM	43.3	76.7	86.7	99.0	76.4
BEWITCHED	21.7	55.0	83.3	99.0	64.8
NATURAL KNIT ® PRG MIX	18.3	40.0	90.0	91.3	59.9
DUTCH WHITE CLOVER	5.0	45.0	83.3	97.7	57.8
LSD VALUE	15.3	13.6	9.6	3.7	5.7
C.V. (%)	12.0	10.7	6.8	2.3	8.3

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 9.   PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT IN THE U.S.
2018 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 2/

NAME	MI1
DLFPS TFAM	93.0
KY-31 E+	93.0
DUTCH WHITE CLOVER	90.0
SOUTHERN MIXTURE	89.7
DLFPS TFASTC	86.7
YAAK	86.3
BGR-TF3	83.3
DLFPS TF-A	83.3
KENBLUE	83.3
VITALITY DOUBLE	83.3
A-SFT	80.0
BEWITCHED	80.0
BULLSEYE	80.0
DTT TALL FESCUE MIX	80.0
DTTHO TF/KBG MIX	80.0
KINGDOM	80.0
NATURAL KNIT ® PRG MIX	80.0
CHANTILLY	73.3
SPARTAN II	66.7
DLFPS CHCRM	63.3
NORTHERN MIXTURE	63.3
RESOLUTE (7H7)	60.0
CRS MIX #3	56.7
CS MIX	56.7
MNHD-15	56.7
CRS MIX #1	53.3
DLFPS CHCRSH	53.3
RADAR	53.3
DLFPS SHHM	50.0
CRS MIX #2	46.7
VITALITY LOW	43.3
QUATRO	36.7
LSD VALUE	22.5
C.V. (%)	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.

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	CT1	MI1	MN1	NC1	NE1	OR1	PA2	VA1	MEAN
VITALITY DOUBLE	86.7	97.7	85.7	88.0	90.0	93.3	60.0	99.0	87.5
DLFPS TFAM	91.7	96.0	85.3	97.7	86.7	90.0	40.0	99.0	85.8
BULLSEYE	93.0	93.0	91.0	88.0	90.0	90.0	35.0	99.0	84.9
DLFPS TFASTC	88.3	94.7	85.3	91.0	90.0	91.7	38.3	99.0	84.8
DLFPS TF-A	91.7	93.0	83.3	86.3	90.0	90.0	33.3	99.0	83.3
A-SFT	85.0	96.0	84.3	79.7	90.0	85.0	16.7	99.0	79.5
BGR-TF3	93.3	93.0	69.3	81.7	83.0	90.0	25.0	99.0	79.3
KINGDOM	90.0	96.0	89.3	50.0	90.0	90.0	18.3	99.0	77.8
DTT TALL FESCUE MIX	90.0	90.0	82.0	61.7	90.0	88.3	16.7	99.0	77.2
SOUTHERN MIXTURE	83.3	93.0	84.0	36.7	90.0	92.3	38.3	99.0	77.1
DTTHO TF/KBG MIX	78.3	96.0	73.7	58.3	90.0	90.0	23.3	99.0	76.1
RADAR	80.0	89.7	78.0	36.7	90.0	92.0	38.3	99.0	75.5
DLFPS CHCRM	88.3	86.7	85.0	26.7	90.0	85.7	36.7	99.0	74.8
KY-31 E+	73.3	99.0	84.0	31.7	90.0	78.3	11.7	99.0	70.9
VITALITY LOW	88.3	60.0	81.3	26.7	90.0	85.0	33.3	99.0	70.5
CRS MIX #1	91.7	76.7	76.7	47.3	90.0	58.3	23.3	99.0	70.4
CS MIX	83.3	73.3	77.0	35.0	90.0	90.7	11.7	99.0	70.0
CRS MIX #3	94.7	71.7	85.3	65.0	93.0	26.7	13.3	99.0	68.6
CRS MIX #2	86.7	63.3	73.5	63.3	93.0	55.0	13.3	99.0	68.4
CHANTILLY	63.3	86.7	77.7	20.0	93.0	86.7	16.7	99.0	67.9
NORTHERN MIXTURE	41.7	86.7	78.0	33.3	90.0	85.0	26.7	99.0	67.5
DLFPS CHCRSH	76.7	76.7	75.7	8.3	83.3	92.7	20.0	99.0	66.5
MNHD-15	76.7	70.0	82.3	13.3	90.0	71.7	5.0	99.0	63.5
DLFPS SHHM	80.0	73.3	75.7	21.7	80.0	61.7	6.7	96.0	61.9
YAAK	43.3	94.7	72.7	33.3	86.7	52.3	11.7	99.0	61.7
RESOLUTE (7H7)	71.7	80.0	74.3	40.0	90.0	26.7	11.7	99.0	61.7
SPARTAN II	65.0	80.0	68.0	4.0	86.7	66.7	8.3	99.0	59.7
QUATRO	56.7	66.7	59.0	5.7	90.0	78.3	5.0	99.0	57.5
BEWITCHED	63.3	89.7	36.3	15.0	80.0	5.7	46.7	99.0	54.5
NATURAL KNIT ® PRG MIX	66.7	93.0	42.0	5.7	90.0	31.7	10.0	96.3	54.4
KENBLUE	2.3	93.0	57.7	40.0	90.0	10.0	26.7	99.0	52.3
DUTCH WHITE CLOVER	1.3	96.0	50.7	48.3	90.0	0.0	11.7	97.7	49.5
LSD VALUE	25.7	15.7	13.6	30.4	9.6	22.6	21.0	1.7	6.9
C.V. (%)	21.6	11.3	11.2	41.9	6.7	20.1	57.1	1.1	17.4

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.

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              TABLE 11.          PERCENT WEED RATINGS OF COOL-SEASON CULTIVARS  1/
                             GROWN UNDER LOW INPUT IN THE U.S.  2/
                                    2018 DATA

              NAME                       MI1     MN1     MO1     MEAN

              NATURAL KNIT ® PRG MIX     36.7    49.7    51.7    46.0
              BEWITCHED                  20.0    63.7    43.3    42.3
              DUTCH WHITE CLOVER         23.3    43.0    50.0    38.8
              KENBLUE                    25.0    42.7    28.3    32.0
              DTTHO TF/KBG MIX           40.0    26.3    23.3    29.9
              BGR-TF3                    35.0    30.7    23.3    29.7
              KINGDOM                    30.0    11.0    40.0    27.0
              A-SFT                      26.7    16.3    35.0    26.0
              QUATRO                      5.0    41.0    31.7    25.9
              RESOLUTE (7H7)             15.0    25.7    28.3    23.0
              DLFPS TF-A                 28.3    16.7    23.3    22.8
              DTT TALL FESCUE MIX        21.7    18.3    28.3    22.8
              YAAK                       28.3    27.3    11.7    22.4
              RADAR                      35.0    22.0     8.3    21.8
              SPARTAN II                  6.7    32.0    26.7    21.8
              VITALITY DOUBLE            28.3    14.3    16.7    19.8
              DLFPS SHHM                  5.0    19.0    35.0    19.7
              CHANTILLY                  13.3    22.7    21.7    19.2
              KY-31 E+                   21.7    16.0    18.3    18.7
              NORTHERN MIXTURE           15.0    22.0    18.3    18.4
              MNHD-15                     5.0    17.7    30.0    17.6
              DLFPS TFASTC               10.0    15.3    26.7    17.3
              CS MIX                      6.7    23.3    21.7    17.2
              CRS MIX #2                  3.3    27.0    16.7    15.7
              SOUTHERN MIXTURE           15.0    16.0    15.0    15.3
              CRS MIX #1                  6.7    23.3    15.0    15.0
              DLFPS CHCRSH                5.0    24.7    15.0    14.9
              CRS MIX #3                 13.3    11.3    18.3    14.3
              DLFPS CHCRM                 8.3    15.3    15.0    12.9
              VITALITY LOW                8.3    18.7    10.0    12.3
              BULLSEYE                    6.7     9.3    16.7    10.9
              DLFPS TFAM                  6.7    10.0    15.0    10.6


              LSD VALUE                  26.2    14.1    14.2    11.0
              C.V. (%)                   94.0    36.1    36.3    54.0
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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.

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                                  PERCENT WEED RATINGS
       NAME                    SUMMER      FALL      MEAN

       DUTCH WHITE CLOVER       90.0       90.0      90.0
       BEWITCHED                86.7       93.0      89.8
       KENBLUE                  60.0       96.0      78.0
       NATURAL KNIT ® PRG MIX   58.3       90.0      74.2
       CHANTILLY                48.3       90.0      69.2
       NORTHERN MIXTURE         36.7       91.0      63.8
       DTTHO TF/KBG MIX         48.3       75.0      61.7
       KINGDOM                  35.3       75.0      55.2
       VITALITY DOUBLE          37.0       68.3      52.7
       DTT TALL FESCUE MIX      31.0       73.3      52.2
       YAAK                     25.0       73.3      49.2
       DLFPS CHCRSH             17.0       80.0      48.5
       RADAR                    20.3       76.7      48.5
       SPARTAN II               13.7       78.3      46.0
       CRS MIX #2               25.0       63.3      44.2
       CS MIX                   11.0       75.0      43.0
       RESOLUTE (7H7)           20.7       65.0      42.8
       A-SFT                    28.3       56.7      42.5
       MNHD-15                  18.3       65.0      41.7
       QUATRO                   14.7       68.3      41.5
       BULLSEYE                 38.3       41.7      40.0
       BGR-TF3                  19.0       53.3      36.2
       SOUTHERN MIXTURE         23.3       46.7      35.0
       KY-31 E+                 26.0       38.3      32.2
       DLFPS TF-A               20.7       40.0      30.3
       DLFPS CHCRM               4.7       53.3      29.0
       VITALITY LOW              6.3       50.0      28.2
       DLFPS SHHM                3.0       50.0      26.5
       CRS MIX #1                6.7       40.0      23.3
       DLFPS TFASTC              2.0       13.3       7.7
       DLFPS TFAM                2.7        8.3       5.5
       CRS MIX #3                2.0        8.3       5.2

       LSD VALUE                31.6       34.6      29.2
       C.V. (%)                 68.8       33.1      39.2
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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.

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            TABLE 13.       PERCERT WEED RATINGS OF COOL-SEASON CULTIVARS  1/
                            GROWN UNDER LOW INPUT AT RALEIGH, NC  2/
                                       2018 DATA


                                       PERCENT WEED RATINGS
            NAME                       JUNE        AUGUST      MEAN


            NATURAL KNIT ® PRG MIX     65.0        80.0        72.5
            BEWITCHED                  51.7        71.7        61.7
            A-SFT                      55.0        55.0        55.0
            YAAK                       50.0        58.3        54.2
            KY-31 E+                   36.7        68.3        52.5
            DTTHO TF/KBG MIX           43.3        60.0        51.7
            DTT TALL FESCUE MIX        43.3        58.3        50.8
            DUTCH WHITE CLOVER         28.3        68.3        48.3
            BGR-TF3                    31.7        56.7        44.2
            QUATRO                     23.3        61.7        42.5
            CHANTILLY                  26.7        53.3        40.0
            KINGDOM                    25.0        55.0        40.0
            NORTHERN MIXTURE           30.0        45.0        37.5
            CS MIX                     26.7        38.3        32.5
            DLFPS CHCRSH               16.7        46.7        31.7
            MNHD-15                    26.7        36.7        31.7
            RADAR                      28.3        35.0        31.7
            VITALITY LOW               18.3        40.0        29.2
            DLFPS TF-A                 21.7        28.3        25.0
            SOUTHERN MIXTURE           15.0        35.0        25.0
            RESOLUTE (7H7)             19.0        30.0        24.5
            DLFPS SHHM                 14.7        31.7        23.2
            VITALITY DOUBLE            11.7        28.3        20.0
            KENBLUE                    23.3        15.0        19.2
            CRS MIX #2                 19.0        16.3        17.7
            BULLSEYE                   15.0        20.0        17.5
            DLFPS CHCRM                 1.7        31.7        16.7
            SPARTAN II                 15.0        16.7        15.8
            CRS MIX #1                  8.3        17.3        12.8
            DLFPS TFASTC                1.7        20.0        10.8
            CRS MIX #3                  0.7         6.3         3.5
            DLFPS TFAM                  0.0         4.0         2.0


            LSD VALUE                  18.7        33.7        22.2
            C.V. (%)                   47.2        47.8        41.9
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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 RATINGS OF COOL-SEASON CULTIVARS 1/
GROWN UNDER LOW INPUT AT MEAD, NE 2/
2018 DATA

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                                 PERCENT WEED RATINGS
NAME                       SUMMER      FALL        MEAN

QUATRO                     66.7        70.0        68.3
DTT TALL FESCUE MIX        56.7        70.0        63.3
BULLSEYE                   56.7        66.7        61.7
KY-31 E+                   53.3        63.3        58.3
CRS MIX #1                 53.3        60.0        56.7
NATURAL KNIT ® PRG MIX     43.3        70.0        56.7
YAAK                       53.3        60.0        56.7
BGR-TF3                    46.7        63.3        55.0
RADAR                      50.0        56.7        53.3
CRS MIX #2                 50.0        53.3        51.7
CS MIX                     46.7        56.7        51.7
MNHD-15                    46.7        56.7        51.7
DLFPS CHCRSH               50.0        50.0        50.0
CHANTILLY                  43.3        53.3        48.3
RESOLUTE (7H7)             50.0        46.7        48.3
VITALITY LOW               43.3        53.3        48.3
DTTHO TF/KBG MIX           40.0        53.3        46.7
A-SFT                      26.7        63.3        45.0
DLFPS TF-A                 33.3        56.7        45.0
DLFPS TFASTC               60.0        30.0        45.0
KENBLUE                    40.0        50.0        45.0
VITALITY DOUBLE            33.3        53.3        43.3
KINGDOM                    16.7        66.7        41.7
NORTHERN MIXTURE           30.0        53.3        41.7
SPARTAN II                 36.7        46.7        41.7
BEWITCHED                  30.0        50.0        40.0
SOUTHERN MIXTURE           30.0        50.0        40.0
DLFPS CHCRM                46.7        26.7        36.7
DUTCH WHITE CLOVER         46.7        26.7        36.7
DLFPS SHHM                 36.7        33.3        35.0
CRS MIX #3                 43.3        23.3        33.3
DLFPS TFAM                 23.3        30.0        26.7

LSD VALUE                  65.6        23.3        38.9
C.V. (%)                   45.5        25.1        29.5
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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 1/
                GROWN UNDER LOW INPUT AT CORVALLIS, OR 2/
                          2018 DATA

NAME	% GRASSY WEEDS SUMMER	% BROAD WEEDS SUMMER	% GRASSY WEEDS FALL	% BROAD WEEDS FALL	MEAN
KENBLUE	81.7	10.7	76.7	1.7	42.7
DUTCH WHITE CLOVER	68.3	3.3	68.3	1.7	35.4
BEWITCHED	53.3	20.0	46.7	6.3	31.6
CRS MIX #3	41.7	4.7	43.3	1.0	22.7
MNHD-15	35.0	16.7	13.3	4.0	17.3
CRS MIX #1	20.0	18.3	16.7	6.3	15.3
RESOLUTE (7H7)	20.0	14.0	20.0	0.3	13.6
QUATRO	21.7	14.0	16.7	0.3	13.2
SPARTAN II	16.7	12.3	20.0	1.0	12.5
DLFPS SHHM	30.0	3.7	13.7	0.7	12.0
CRS MIX #2	12.7	15.0	13.3	2.3	10.8
VITALITY LOW	13.3	5.7	15.0	0.3	8.6
CS MIX	5.7	12.3	5.7	4.0	6.9
YAAK	6.0	4.0	16.0	0.0	6.5
CHANTILLY	7.7	5.7	7.0	0.7	5.3
RADAR	6.3	5.7	3.7	2.7	4.6
DLFPS CHCRM	7.3	2.0	6.0	0.7	4.0
DLFPS CHCRSH	2.7	5.7	3.0	1.7	3.3
NATURAL KNIT ® PRG MIX	2.0	5.0	1.7	4.3	3.3
DTT TALL FESCUE MIX	1.7	4.3	3.3	0.7	2.5
NORTHERN MIXTURE	1.7	4.0	2.7	1.3	2.4
DLFPS TFASTC	4.3	4.0	0.0	0.7	2.3
VITALITY DOUBLE	1.0	6.0	0.0	2.0	2.3
BULLSEYE	1.7	5.7	0.0	0.3	1.9
KINGDOM	1.0	6.0	0.0	0.0	1.8
DTTHO TF/KBG MIX	1.7	3.3	1.7	0.0	1.7
DLFPS TF-A	0.7	4.3	0.0	0.0	1.3
A-SFT	1.3	2.3	0.7	0.0	1.1
BGR-TF3	0.7	2.7	0.0	0.0	0.8
DLFPS TFAM	0.7	1.7	0.0	0.7	0.8
KY-31 E+	0.7	2.3	0.0	0.0	0.8
SOUTHERN MIXTURE	0.7	2.7	0.0	0.0	0.8
LSD VALUE	13.3	15.4	13.8	5.9	6.2
C.V. (%)	60.6	95.4	71.1	169.9	46.5

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 1/
          GROWN UNDER LOW INPUT AT KENNETT SQUARE, PA 2/
                    2018 DATA

NAME	EARLY SUMMER	LATE SUMMER	MEAN
DUTCH WHITE CLOVER	91.7	95.0	93.3
QUATRO	86.7	95.0	90.8
DTT TALL FESCUE MIX	83.3	95.0	89.2
SPARTAN II	85.0	93.3	89.2
KINGDOM	83.3	91.7	87.5
NATURAL KNIT ® PRG MIX	80.0	95.0	87.5
CS MIX	76.7	95.0	85.8
DLFPS SHHM	76.7	95.0	85.8
NORTHERN MIXTURE	78.3	93.3	85.8
CHANTILLY	78.3	91.7	85.0
DLFPS CHCRSH	81.7	88.3	85.0
RESOLUTE (7H7)	76.7	93.3	85.0
BEWITCHED	90.0	76.7	83.3
KENBLUE	78.3	86.7	82.5
A-SFT	68.3	91.7	80.0
DLFPS TF-A	70.0	86.7	78.3
MNHD-15	60.0	95.0	77.5
SOUTHERN MIXTURE	68.3	83.3	75.8
VITALITY LOW	63.3	88.3	75.8
CRS MIX #1	63.3	86.7	75.0
CRS MIX #2	56.7	93.3	75.0
CRS MIX #3	55.0	95.0	75.0
BGR-TF3	60.0	88.3	74.2
KY-31 E+	56.7	91.0	73.8
DLFPS TFAM	76.7	70.0	73.3
YAAK	53.3	93.3	73.3
DTTHO TF/KBG MIX	56.7	83.3	70.0
BULLSEYE	50.0	86.7	68.3
DLFPS TFASTC	63.3	71.7	67.5
RADAR	53.3	81.7	67.5
DLFPS CHCRM	56.7	70.0	63.3
VITALITY DOUBLE	65.0	60.0	62.5
LSD VALUE	22.9	19.7	18.9
C.V. (%)	17.8	11.5	12.0

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.

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              TABLE 17.  PERCENT PLANTED SPECIES AND WEED RATINGS OF COOL-SEASON CULTIVARS  1/
                        GROWN UNDER LOW INPUT AT BLACKSBURG, VA  2/
                                    2018 DATA

                         PLANTED              PLANTED
                         SPECIES    WEEDS     SPECIES    WEEDS
         NAME            SPRING     SPRING    FALL       FALL      MEAN

         DLFPS TFAM        8.3       92.7       8.3       92.7      50.5
         SPARTAN II       10.0       90.0       8.3       93.0      50.3
         A-SFT            10.7       89.3       9.0       91.0      50.0
         BEWITCHED        58.3       41.7      58.3       41.7      50.0
         BGR-TF3           6.7       93.3       5.0       95.0      50.0
         BULLSEYE          7.3       92.7       7.3       92.7      50.0
         CRS MIX #1        8.3       91.7       6.7       93.3      50.0
         CRS MIX #2        8.3       91.7       8.3       91.7      50.0
         DLFPS CHCRM       8.3       91.7       8.3       91.7      50.0
         DLFPS CHCRSH     11.7       88.3      13.3       86.7      50.0
         DLFPS TF-A        3.0       97.0       5.7       94.3      50.0
         DLFPS TFASTC     13.3       86.7      11.7       88.3      50.0
         DTT TALL FESCUE MIX  10.0   90.0      10.0       90.0      50.0
         DTTHO TF/KBG MIX  8.3       91.7       8.3       91.7      50.0
         KINGDOM          10.0       90.0      11.7       88.3      50.0
         KY-31 E+          4.0       96.0       5.0       95.0      50.0
         MNHD-15           6.7       93.3       6.7       93.3      50.0
         NORTHERN MIXTURE  8.3       91.7       8.3       91.7      50.0
         QUATRO           15.0       85.0      16.7       83.3      50.0
         RADAR             9.0       91.0      11.7       88.3      50.0
         RESOLUTE (7H7)   23.3       76.7      21.7       78.3      50.0
         YAAK             13.3       86.7      13.3       86.7      50.0
         VITALITY DOUBLE   3.0       97.0       2.3       97.3      49.9
         VITALITY LOW     15.0       85.0      13.3       86.3      49.9
         CRS MIX #3        7.3       92.7       5.0       94.3      49.8
         CS MIX           14.0       85.0      16.7       83.3      49.8
         SOUTHERN MIXTURE  5.0       95.0       1.7       97.7      49.8
         KENBLUE          20.0       78.3      20.0       80.0      49.6
         DUTCH WHITE CLOVER 53.3     45.0      50.0       48.3      49.2
         CHANTILLY        15.0       81.3      15.0       84.7      49.0
         DLFPS SHHM       15.0       81.7      16.7       80.0      48.3
         NATURAL KNIT ® PRG MIX 25.0 66.7      31.7       65.0      47.1

         LSD VALUE        18.7       18.4      18.4       18.1       2.1
         C.V. (%)         80.6       12.8      79.7       12.5       1.7
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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
2018 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	QUALITY MEAN 1/	MAXIMUM IN TOP 25% 2/
A-SFT	4.4	8.3
BEWITCHED	3.4	8.3
BGR-TF3	4.7	25.0
BULLSEYE	4.8	50.0
CHANTILLY	4.2	8.3
CRS MIX #1	4.9	41.7
CRS MIX #2	4.7	41.7
CRS MIX #3	4.5	33.3
CS MIX	4.4	16.7
DLFPS CHCRM	4.5	8.3
DLFPS CHCRSH	4.4	0.0
DLFPS SHHM	4.0	0.0
DLFPS TF-A	4.9	58.3
DLFPS TFAM	5.0	58.3
DLFPS TFASTC	5.0	41.7
DTT TALL FESCUE MIX	4.5	25.0
DTTHO TF/KBG MIX	4.6	50.0
DUTCH WHITE CLOVER	2.7	0.0
KENBLUE	3.9	8.3
KINGDOM	4.3	25.0
KY-31 E+	4.2	16.7
MNHD-15	4.6	41.7
NATURAL KNIT ® PRG MIX	3.1	0.0
NORTHERN MIXTURE	4.2	0.0
QUATRO	3.8	8.3
RADAR	4.5	25.0
RESOLUTE (7H7)	4.6	25.0
SOUTHERN MIXTURE	4.6	25.0
SPARTAN II	4.5	25.0
VITALITY DOUBLE	5.0	66.7
VITALITY LOW	4.7	25.0
YAAK	4.5	8.3
LSD VALUE	0.3	
C.V. (%)	13.3	

*/ 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 LO