

## STOP 9

### EVALUATION OF CULTIVARS AND EXPERIMENTALS OF KENTUCKY BLUEGRASSES AND FESCUES

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#### Kentucky bluegrasses

Kentucky bluegrass is the most widely used lawn grass in the cool season states.

M.S.U. is one of the research stations included in a National Kentucky Bluegrass Variety Trial. Both named and experimental entries are being tested at many locations, and results will be pooled. This should provide information on the ranges of adaptation of newly released cultivars.

The visual quality ratings for the Kentucky bluegrass cultivars and experimentals are given in Tables 1 and 2, respectively. It is important to evaluate these grasses several times during the season as their relative ranking and appearance may change from one month to another. In the right column of each table is the grass height measured in the spring before it was mowed. Of particular interest is the more rapid spring growth of the "common" types of Kentucky bluegrass, Kenblue (Table 1) and South Dakota Certified (Table 2), compared to most of the improved cultivars or selections.

#### Fescues

Variety and experimental entries have been established for chewings, creeping red, hard and sheep, tall, and meadow fescues.

The newly developed tall fescues have survived the first winter well (extensive snow cover late in the season), and some appear to have a desirable narrower leaf than existing strains.

No fine leafed fescue cultivar as yet has resistance to leaf spot.

Evaluations of creeping, chewings, tall and meadow fescues and summarized in the Tables 3 through 9.

There are several blocks of Kentucky bluegrass and fescues which have a range of nitrogen fertility treatments to determine the range of nitrogen to which they are adopted.

Table 1. Evaluations of Kentucky Bluegrass Cultivars -  
National Test. Plots established Summer, 1981.

Height,  
cm

Cultivar		10/20/81	4/30/82	6/11/82	7/1/82	8/14/82	5/13/82
Visual Quality Ratings(9=best)							
1)	01 ADELPHI	3.67 FH	4.67 DG	4.67 CF	7.00 BG	6.00 AD	5.00 HL
2)	02 GLADE	6.67 AC	3.33 EI	6.67 AC	8.33 AC	6.00 AD	5.58 FL
3)	03 BIRKA	8.00 A	4.67 DG	6.00 AD	7.67 AE	4.67 CE	6.92 CG
4)	04 MONOPOLY	4.00 EH	5.33 BE	5.67 AE	6.33 DH	4.67 CE	7.67 BD
5)	05 RAM-1	7.00 AB	4.00 DH	5.67 AE	7.33 AF	5.67 AE	5.83 EL
6)	06 FYLKING	6.00 BE	4.67 DG	6.33 AD	8.33 AC	6.33 AC	6.75 CG
7)	07 CHERI	6.33 AD	3.33 EI	5.33 AE	7.67 AE	5.33 AE	5.75 EL
8)	09 WABASH	4.33 DH	7.33 AB	4.67 CF	7.00 BG	5.33 AE	8.58 B
9)	10 NUGGET	5.67 BF	1.33 I	6.67 AC	8.67 AB	6.33 AC	4.50 KL
10)	17 BARON	4.67 CH	3.33 EI	6.67 AC	7.33 AF	5.33 AE	4.75 IL
11)	18 ENMUNDI	5.67 BF	5.67 AD	6.00 AD	8.33 AC	5.33 AE	5.42 FL
12)	19 FLUSH	4.00 EH	5.00 CF	6.00 AD	7.33 AF	5.67 AE	6.08 DK
13)	20 PARADE	4.00 EH	4.33 DG	5.00 BF	5.33 GJ	4.33 DE	5.75 EL
14)	21 TRENTON	5.33 BG	4.67 DG	5.33 AE	6.67 CG	4.67 CE	6.67 CH
15)	22 RUGBY	5.33 BG	4.00 DH	5.33 AE	6.00 EI	5.00 BE	6.42 DI
16)	26 HOLIDAY	4.33 DH	2.00 HI	4.67 CF	6.00 EI	5.33 AE	4.33 L
17)	27 GERONIMO	4.67 CH	4.00 DH	4.33 DG	6.33 DH	5.00 BE	7.42 BE
18)	31 TOUCHDOWN	4.33 DH	4.00 DH	7.00 AB	6.33 DH	4.67 CE	4.92 IL
19)	32 WELCOME	5.67 BF	4.67 DG	5.67 AE	7.33 AF	6.00 AD	6.17 DK
20)	35 BONO	6.33 AD	4.33 DG	6.67 AC	8.33 AC	5.33 AE	6.08 DK
21)	36 KENBLUE	4.33 DH	7.67 A	2.33 G	4.33 IJ	4.00 E	???? A
22)	37 HARMONY	4.67 CH	3.00 FI	5.67 AE	6.33 DH	4.67 CE	5.67 FL
23)	38 AMERICA	4.33 DH	3.00 FI	6.67 AC	7.00 BG	6.33 AC	4.17 L
24)	39 VANESSA	5.67 BF	4.67 DG	6.67 AC	7.33 AF	5.33 AE	5.75 EL
25)	40 MOSA	6.00 BE	3.33 EI	5.67 AE	7.67 AE	5.00 BE	5.42 FL
26)	41 CELLO	5.67 BF	4.67 DG	3.00 FG	5.67 FJ	5.33 AE	5.83 EL
27)	44 MAJESTIC	5.00 BG	6.00 AD	6.67 AC	8.00 AD	7.00 A	5.00 HL
28)	45 BONNIEBLUE	6.00 BE	4.67 DG	6.00 AD	6.33 DH	5.67 AE	5.33 GL
29)	46 VANTAGE	2.67 H	7.00 AC	2.33 G	4.00 J	4.33 DE	8.17 BC
30)	47 MERIT	4.67 CH	4.67 DG	6.33 AD	7.67 AE	5.33 AE	6.33 DI
31)	57 SHASTA	5.00 BG	4.33 DG	5.33 AE	6.67 CG	5.00 BE	5.67 FL
32)	58 COLUMBIA	5.33 BG	5.33 BE	5.67 AE	6.00 EI	5.00 BE	6.42 DI
33)	60 A-34	3.33 GH	5.00 CF	3.67 EG	5.67 FJ	4.33 DE	8.58 B
34)	61 SYDSPORT	3.33 GH	2.67 GI	5.00 BF	5.67 FJ	5.33 AE	6.25 DJ
35)	66 BRISTOL	7.00 AB	4.33 DG	7.00 AB	8.00 AD	6.67 AB	4.58 JL
36)	67 VICTA	4.33 DH	3.33 EI	5.00 BF	6.00 EI	4.33 DE	4.50 KL
37)	68 ENOBLE	3.33 GH	3.33 EI	5.00 BF	6.00 EI	5.33 AE	5.83 EL
38)	72 MERION	6.00 BE	3.33 EI	4.33 DG	6.67 CG	4.33 DE	6.67 CH
39)	74 BAYSIDE	4.67 CH	5.00 CF	4.67 CF	4.67 HJ	4.67 CE	7.08 BF
40)	76 MYSTIC	3.67 FH	7.33 AB	6.67 AC	8.00 AD	6.67 AB	5.58 FL
41)	78 ECLIPSE	5.00 BG	4.33 DG	7.33 A	9.00 A	6.33 AC	5.75 EL
42)	84 BARBLUE	4.33 DH	5.33 BE	5.00 BF	6.33 DH	5.00 BE	5.50 FL

COLUMN MEANS FOLLOWED BY THE SAME LETTER GROUPINGS ARE NOT SIGNIFICANTLY DIFFERENT AT THE 5% LEVEL ACCORDING TO DMRT.

Table 2. Evaluations of Kentucky Bluegrass Experimentals-National Test. Plots established Summer, 1981.

		10/20/81	4/30/82	6/11/82	7/1/82	8/14/82	5/14/82	
		Visual Quality Ratings(9=best)					Height, cm	
1)	08 243	4.67 CH	4.33 BE	5.67 BG	6.00 AF	5.67 AE	4.92 JM	
2)	11 239	5.33 AF	3.33 DF	4.67 DI	5.33 CG	4.33 BF	5.67 EM	
3)	12 S-21	2.33 JK	5.33 AD	3.00 IJ	4.33 EG	3.67 DF	7.75 BD	
4)	13 PSU-190	5.00 BG	2.67 EF	4.00 FJ	6.00 AF	5.00 AF	5.92 DL	
5)	14 PSU-150	4.67 CH	5.00 AE	5.33 BH	6.33 AE	5.33 AF	7.25 BF	
6)	15 PSU-173	4.33 DI	4.00 BF	4.33 EJ	5.67 BF	6.67 AB	7.17 BG	
7)	16 KIMONO	3.33 GK	3.00 DF	5.67 BG	6.67 AE	4.33 BF	4.75 JM	
8)	23 SV-01617	6.00 AD	3.33 DF	4.33 EJ	6.00 AF	4.67 BF	5.83 EM	
9)	24 BANFF	5.00 BG	5.33 AD	4.33 EJ	6.00 AF	4.33 BF	6.50 CJ	
10)	25 DORMIE	2.00 K	6.00 AC	6.67 BD	7.33 AC	5.33 AF	5.17 HM	
11)	28 ASPEN	5.00 BG	3.33 DF	6.00 BF	5.67 BF	4.00 CF	5.08 IM	
12)	29 MLM-18011	6.33 AC	4.00 BF	7.33 AB	8.00 AB	5.67 AE	5.42 FM	
13)	30 CEB VB 3965	4.67 CH	4.67 AE	7.00 BC	7.33 AC	5.33 AF	5.58 FM	
14)	33 WW AG 463	6.00 AD	3.33 DF	3.33 HJ	5.00 CG	4.67 BF	5.92 DL	
15)	34 WW AG 480	2.67 IK	2.67 EF	4.00 FJ	5.33 CG	5.33 AF	4.50 LM	
16)	42 WW AG 478	3.67 FK	1.67 F	6.00 BF	6.67 AE	4.67 BF	4.00 M	
17)	43 PIEDMONT	2.00 K	6.33 AB	3.00 IJ	5.00 CG	4.00 CF	7.92 BC	
18)	48 ARGYLE	3.67 FK	6.33 AB	3.33 HJ	3.67 FG	4.00 CF	8.83 AB	
19)	49 CHARLOTTE	6.33 AC	3.67 CF	4.67 DI	6.00 AF	5.67 AE	6.83 CI	
20)	50 A20-6	4.33 DI	2.67 EF	3.33 HJ	6.00 AF	4.67 BF	5.92 DL	
21)	51 A20	4.33 DI	3.00 DF	3.67 GJ	3.67 FG	3.33 EF	6.25 CL	
22)	52 H-7	2.67 IK	3.00 DF	3.00 IJ	4.33 EG	3.67 DF	6.00 DL	
23)	53 I-13	3.00 HK	3.33 DF	4.00 FJ	5.67 BF	4.33 BF	5.50 FM	
24)	54 A20-6A	4.67 CH	4.67 AE	3.67 GJ	4.67 DG	4.67 BF	5.83 EM	
25)	55 N535	6.67 AB	4.67 AE	6.33 BE	6.67 AE	6.00 AD	4.58 KM	
26)	56 1528T	7.00 A	3.00 DF	9.00 A	8.33 A	7.33 A	5.25 HM	
27)	59 APART	3.67 FK	5.00 AE	4.00 FJ	5.33 CG	3.33 EF	7.00 CH	
28)	62 MER PP 300	4.33 DI	2.67 EF	5.33 BH	5.33 CG	4.33 BF	5.33 GM	
29)	63 MER PP 43	5.67 AE	3.67 CF	4.33 EJ	5.33 CG	4.00 CF	5.58 FM	
30)	64 MONA	5.00 BG	5.00 AE	6.67 BD	6.00 AF	4.33 BF	6.33 CL	
31)	65 LOVEGREEN	4.00 EJ	3.00 DF	5.33 BH	6.67 AE	4.00 CF	5.33 GM	
32)	69 SH-2	4.33 DI	3.00 DF	3.67 GJ	5.33 CG	3.67 DF	5.33 GM	
33)	70 NJ 735	2.67 IK	3.33 DF	3.33 HJ	4.67 DG	4.33 BF	5.33 GM	
34)	71 S. D. COMMON	3.33 GK	6.00 AC	2.33 J	3.00 G	3.00 F	9.92 A	
35)	73 BA-61-91	4.00 EJ	3.67 CF	6.33 BE	6.00 AF	5.00 AF	4.92 JM	
36)	75 225	5.67 AE	3.33 DF	4.33 EJ	5.00 CG	4.67 BF	5.92 DL	
37)	77 ADMIRAL	5.00 BG	5.00 AE	5.00 CI	7.00 AD	6.33 AC	6.42 CK	
38)	79 ESCORT	5.00 BG	4.00 BF	4.33 EJ	6.00 AF	5.00 AF	6.50 CJ	
39)	80 K3-162	3.67 FK	7.00 A	3.33 HJ	5.00 CG	4.33 BF	9.58 A	
40)	81 K3-179	4.00 EJ	4.67 AE	3.33 HJ	4.33 EG	4.33 BF	5.25 HM	
41)	82 K3-178	4.67 CH	3.67 CF	5.00 CI	5.33 CG	4.67 BF	6.08 DL	
42)	83 K1-152	5.67 AE	4.33 BE	5.67 BG	6.33 AE	5.00 AF	7.50 BE	

COLUMN MEANS FOLLOWED BY THE SAME LETTER GROUPINGS ARE NOT SIGNIFICANTLY DIFFERENT AT THE 5% LEVEL ACCORDING TO DMRT.



Table 3. 1980 CREEPING RED FESCUE CULTIVARS

Visual Turf grass Quality Ratings(9=best)

Cultivar	8/11/81	10/6/81	10/30/81	5/4/82	7/1/82
1) ACCENT	5.67 BD	4.33 DG	3.33 CD	6.33 AC	5.00 DF
2) ADONIS	7.00 AB	6.00 BE	6.00 B	3.00 F	6.67 BD
3) BOREAL	5.00 CE	5.00 CG	3.00 D	6.33 AC	5.67 CF
4) COMMON	3.67 EG	3.67 EG	3.00 D	4.67 CE	5.00 DF
5) DAWSON	8.00 A	8.67 A	8.33 A	5.00 CE	8.00 AB
6) ENSYLVA	6.00 BD	8.33 AB	6.33 AB	6.67 AB	5.67 CF
7) ENVIRA	3.00 G	2.67 G	4.67 BD	4.67 CE	3.00 G
8) ENZET	3.33 FG	3.33 FG	4.00 BD	5.33 BD	4.00 FG
9) ERIKA	6.33 BD	7.33 AC	6.00 B	5.00 CE	6.67 BD
10) FRT-GB BAR	6.33 BD	5.67 CF	5.67 BC	7.00 A	6.00 CE
11) ILLAHEE	6.33 BD	5.33 CF	4.67 BD	6.00 AC	5.00 DF
12) MONCORDE	5.33 BD	5.33 CF	5.33 BD	3.67 EF	6.33 CD
13) MSU X1	5.00 CE	5.00 CG	5.67 BC	6.33 AC	5.33 CF
14) MSU X2	5.67 BD	4.00 EG	4.33 BD	6.33 AC	5.00 DF
15) ORSE	6.33 BD	5.33 CF	5.67 BC	6.00 AC	7.00 AC
16) PENNLAWN	5.33 BD	4.33 DG	4.33 BD	7.00 A	5.00 DF
17) POLAR	6.67 AC	8.67 A	8.33 A	5.33 BD	8.33 A
18) RUBY	4.67 DF	4.33 DG	4.33 BD	5.67 AC	4.00 FG
19) SATIN	7.00 AB	6.67 AD	6.33 AB	3.67 EF	5.33 CF
20) STARLIGHT	3.00 G	4.33 DG	5.67 BC	4.00 DF	4.33 EG

Table 4. CREEPING RED FESCUE EXPERIMENTAL STRAINS

1) 31 FRR-31 MOM	4.67 CF	4.67 CG	4.33 BE	2.33 E	4.67 BC
2) 38 FRR-38 MOM	3.67 EF	3.00 G	4.00 CE	5.67 AB	3.67 C
3) 108 WWRS 108 WEIB	7.33 A	7.33 AB	6.00 AC	3.00 DE	7.33 A
4) 110 WWRS 110 WEIB	7.33 A	7.00 AC	7.67 A	3.67 CE	6.67 AB
5) 112 WWRS 112 WEIB	4.33 CF	3.67 FG	2.67 E	4.67 AD	5.00 BC
6) 113 WWRS 113 WEIB	5.67 AD	6.00 AF	5.33 BD	5.00 AC	5.67 AC
7) 205 FRR-205 MOM	5.33 BE	3.00 G	2.67 E	4.33 AD	5.33 AC
8) 232 FRR-232 MOM	5.33 BE	4.33 DG	3.33 DE	4.67 AD	5.67 AC
9) 4211 FRR-4211 MOM	7.33 A	7.67 A	7.67 A	3.67 CE	6.67 AB
10) 66111 MINN	4.67 CF	4.33 DG	5.00 BD	5.33 AC	5.33 AC
11) 66136 MINN	4.00 DF	4.67 CG	4.33 BE	3.67 CE	5.67 AC
12) 66218 MINN	4.67 CF	5.67 AF	5.67 AC	6.00 A	5.00 BC
13) 66223 MINN	3.00 F	4.00 EG	4.33 BE	5.67 AB	5.67 AC
14) 66233 MINN	4.00 DF	3.67 FG	3.33 DE	5.00 AC	6.00 AB
15) 66354 MINN	4.00 DF	4.33 DG	3.33 DE	4.00 BE	5.33 AC
16) 67123 MINN	3.67 EF	4.00 EG	5.00 BD	4.67 AD	5.33 AC
17) 71192 NK	4.33 CF	4.00 EG	4.33 BE	4.00 BE	5.67 AC
18) 79190 NK	5.33 BE	3.67 FG	2.67 E	4.33 AD	4.67 BC
19) K4-21 NK	5.67 AD	6.33 AE	4.33 BE	4.00 BE	6.00 AB
20) K5-29 NK	5.33 BE	5.67 AF	5.33 BD	5.33 AC	5.67 AC
21) MSU X1	6.67 AB	6.67 AD	5.33 BD	5.67 AB	5.33 AC
22) MSU X2	6.00 AC	5.67 AF	4.00 CE	5.00 AC	5.33 AC
23) SYN4TW PURE	3.67 EF	5.00 BG	5.67 AC	4.33 AD	5.67 AC
24) SYNBLF PURE	5.33 BE	6.00 AF	6.33 AB	5.00 AC	5.67 AC

Table 5. 1980 CHEWINGS FESCUE CULTIVARS  
EAST LANSING (G52)

Cultivar	Visual <sup>44</sup> Turfgrass Quality Ratings (9=best)				
	8/11/81	10/6/81	10/30/81	5/4/82	7/1/82
1) AGRAM	5.67 AB	5.33 AD	4.00 BD	4.67 A	4.33 AC
2) ATLANTA	7.00 A	5.67 AD	4.00 BD	4.67 A	5.00 AC
3) BANNER	7.67 A	7.67 AB	7.00 AB	3.67 A	5.00 AC
4) BARFALLA	6.00 AB	7.00 AC	6.67 AB	5.33 A	5.00 AC
5) CASCADE	5.00 AB	1.33 E	1.33 D	4.33 A	3.33 BC
6) CHECKER	6.33 AB	4.67 BD	5.00 AC	5.67 A	5.00 AC
7) CIRRUS	6.33 AB	5.00 AD	4.67 AC	3.00 A	6.33 A
8) DIAMOND	7.67 A	8.00 A	7.67 A	5.33 A	5.67 AB
9) FIDELIMO	5.00 AB	6.33 AC	6.33 AC	4.33 A	3.33 BC
10) FORTRESS	5.33 AB	5.67 AD	4.67 AC	4.33 A	4.33 AC
11) GRELO	6.00 AB	2.67 DE	3.33 CD	4.33 A	4.67 AC
12) HIGHLIGHT	6.67 AB	7.00 AC	7.00 AB	5.33 A	4.33 AC
13) JADE	6.67 AB	6.00 AC	5.67 AC	6.00 A	5.67 AB
14) JAMESTOWN	6.67 AB	7.00 AC	4.33 BC	6.00 A	5.33 AC
15) KOKET	7.00 A	5.67 AD	6.67 AB	5.00 A	4.33 AC
16) LIFALLA	3.67 B	6.00 AC	5.00 AC	2.67 A	3.00 C
17) LONGFELLOW	7.33 A	6.00 AC	4.33 BC	5.00 A	5.33 AC
18) MSU WINTERGREEN BR	6.67 AB	6.33 AC	6.67 AB	5.33 A	4.33 AC
19) NK WINTERGREEN FOUND	5.67 AB	5.00 AD	5.67 AC	6.00 A	5.00 AC
20) SHADOW	8.00 A	6.00 AC	5.00 AC	5.67 A	5.33 AC
21) SONNET	7.00 A	4.33 CD	4.67 AC	5.00 A	5.33 AC

Table 6. 1980 CHEWINGS FESCUE EXPERIMENTAL STRAINS  
EAST LANSING (G53)

	4/13/82	10/30/81	5/4/82	7/1/82
1) FRC Z BAR	7.67 AB	5.67 AC	4.67 AB	7.33 A
2) FRC 64 MOM	6.67 AB	5.00 AC	4.33 AB	6.00 AB
3) FRC 92 MOM	8.33 A	5.33 AC	3.00 AB	4.00 AC
4) FRC LAU BAR	8.33 A	8.67 A	4.00 AB	6.33 A
5) FRC SH-A BAR	8.67 A	8.33 AB	6.33 A	6.00 AB
6) FRC WA BAR	8.00 A	6.67 AC	4.33 AB	7.00 A
7) FRC WB BAR	7.00 AB	6.67 AC	5.00 AB	7.00 A
8) FRC WC 80 BAR	3.33 C	2.33 C	3.00 AB	3.00 BC
9) FRC112 MOM	9.00 A	6.67 AC	5.00 AB	6.67 A
10) FRC113 MOM	6.33 AC	5.67 AC	5.00 AB	6.33 A
11) MSU X3 (CB-2)	6.00 AC	4.33 AC	3.67 AB	4.67 AC
12) ORE E	4.33 BC	4.00 BC	2.67 B	2.33 C
13) TCE 80 PURE	7.67 AB	6.67 AC	5.33 AB	6.67 A

Table 7. 1980 TALL FESCUE CULTIVARS  
EAST LANSING (G56)

Visual Turfgrass Quality Ratings (9=best)

Cultivar	10/6/81	10/30/81	7/1/82	5/4/82	
				Visual Rating	Leaf Width mm
1) ALTA	6.67 A	8.00 A	8.00 AC	4.67	CD
2) BACKAFALL	4.67 A	5.33 B	7.00 CD	2.67	E
3) FALCON	7.00 A	8.00 A	8.33 AB	6.67	AB
4) FAWN	6.00 A	7.00 AB	8.00 AC	6.00	AC
5) FORAGER	6.67 A	7.33 AB	7.67 BD	6.00	AC
6) KENHY	4.33 A	5.33 B	6.67 D	3.33	DE
7) KENTUCKY 31	5.67 A	7.33 AB	7.67 BD	5.67	BC
8) MONACO	6.33 A	7.00 AB	9.00 A	7.33	A

Table 8. 1980 TALL FESCUE EXPERIMENTAL STRAINS  
EAST LANSING (G57)

	10/6/81	10/30/81	5/4/82	7/1/82		5/4/82	
				Visual Rating	Leaf Width mm	Visual Rating	Leaf Width mm
1) 147901 NAPB	8.00 AB	8.00 AB	5.00 B	7.33 AC	7.00	AB	
2) 7801 NAPB	4.00 B	6.67 BD	5.33 AB	7.00 AC	6.33	AC	
3) 7802 NAPB	5.33 AB	7.67 AC	5.00 B	6.33 C	5.67	AC	
4) 79310 NK	4.00 B	5.67 DE	6.00 AB	6.33 C	5.33	BC	
5) AG 125A PURE	6.00 AB	8.67 A	5.33 AB	7.67 AC	6.33	AC	
6) GTF-80 PURE	5.33 AB	8.00 AB	7.00 A	8.00 AB	7.33	A	
7) K5-27 NK	5.33 AB	5.33 E	6.00 AB	6.33 C	5.00	C	
8) KENTUCKY 31	6.00 AB	6.33 CE	6.67 AB	7.00 AC	5.00	C	
9) SYN 55B PURE	5.00 AB	7.00 BC	3.00 C	6.67 BC	6.00	AC	
10) TF 791 INTE	8.67 A	7.67 AC	7.00 A	8.33 A	6.67	AC	

Table 9. 1980 MEADOW FESCUE CULTIVARS  
EAST LANSING (G58)

	10/6/81	10/30/81	5/4/82	7/1/82	
				Visual Rating	Leaf Width mm
1) BEAUMONT	7.00 A	8.00 A	6.67 AB	7.33	C
2) FP 73-5 BAR	6.67 A	6.33 B	5.33 B	8.33	AB
3) MER FP SYN I	7.67 A	7.00 AB	6.33 AB	9.00	A
4) MIMER	5.00 B	6.67 B	7.00 A	7.33	C
5) TRADER	5.33 B	6.33 B	6.67 AB	8.00	BC