

2019 Michigan Dry Bean Performance Trials



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Table 1. Navy bean varieties, average maturity, yields at four county locations in 2019, average yields by variety for Bay, Huron, Sanilac, and Tuscola County in 2019 (1-year AVG.), 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.), white mold rating (1-5) and lodging rating (1-5).

VARIETY	DAYS	BAY	HURON	SANILAC	TUSCOLA	1-year AVG.	2-year AVG.	3-year AVG.	WM Rating ^a	Lodging ^b
HMS MEDALIST	98-106	1834*	2934	3619*	2682	2767	2714	2599	2.1	2.5
MERLIN	98-106	1766*	3231	2682	2150	2457	2816*	2623	2.0	2.0
APEX	95-104	1769*	2911	3448*	2974	2776*	2872*	-	1.8	2.0
BLIZZARD	94-99	1476*	3176	3064	2859	2644	2708	2565	2.3	1.5
INDI	89-96	1442	3182	2547	2476	2412	2529	-	2.0	1.5
VIGILANT	91-96	2024**	3199	2437	2817	2619	-	-	2.4	2.0
REXETER	93-106	1544*	3923**	2371	3148	2747	2645	2540	2.8	2.5
NAUTICA	94-104	1919*	3131	2402	2854	2577	2432	2497	1.8	2.0
MIST	93-102	1748*	3258	2969	2660	2659	2645	2499	1.5	2.5
ARGOSY	92-100	1896*	3374	3173*	2973	2854*	2846*	2841*	2.2	2.5
EX 1701	92-100	1154	2708	2548	2139	2137	2462	-	2.6	2.5
EX 1702	94-102	1470*	2648	2652	2522	2323	2639	-	2.3	2.5
EX 1708	95-103	855	3041	1913	1603	1853	-	-	-	-
EX 1711	93-100	1301	2881	2184	2461	2207	-	-	-	-
VALIANT	92-100	1332	3151	3208*	2430	2530	-	-	-	-
PROVITA 12039	92-99	1828*	3067	3651**	3410*	2989	3032**	2912**	2.6	2.5
HMS BOUNTY	93-104	1441	3164	2655	2902	2541	2981*	2782*	1.3	1.5
PROVITA 12062	94-101	1608*	3773*	3109*	3236*	2932	2912*	2862*	2.8	2.5
PROVITA 12063	95-102	1448	3564*	2861	3569*	2861*	2960*	2867*	2.2	1.5
PROVITA 12064	96-104	1452*	2915	-	-	-	2496	2584	1.6	2.0
ARMADA	96-102	1541*	3530*	3575*	2821	2867*	2956*	2823*	2.0	2.0
PROVITA 14068	96-100	1968*	2976	2432	3087	2616	2700	2774*	3.0	2.0
PROVITA 14080	95-102	1630*	3330	3008	2853	2705	-	-	-	-
PROVITA 14084	97-104	1563*	2791	2789	3082	2556	2707	2738	3.1	2.0
PROVITA 15094	93-102	1579*	3860*	3537*	2948	2981*	2956*	-	2.1	2.5
PROVITA 15095	96-104	1518*	3312	3490*	3892**	3053**	2996*	-	3.2	3.0
SV1893GH	97-106	-	2736	1796	-	-	2433	-	2.0	2.5
MSU N17506	95-98	1622	3290	2602	2635	2537	2363	-	3.5	1.5
MSU N18102	96-99	1397	2866	2765	2259	2322	-	-	-	-
MSU N18109	96-98	1649*	3159	2722	3612*	2786*	-	-	-	-
EX 1801	97-98	-	3227	-	2562	-	-	-	-	-
EX 1802	94-95	-	3168	-	2162	-	-	-	-	-
EX 1803	96-98	-	2966	-	1557	-	-	-	-	-
EX 1804	96-97	-	3304	-	2675	-	-	-	-	-
MEAN:		1578	3169	2835	2750	2618	2731	2701	2.3	2.1
LSD _(0.05) :		573	497	572	718	277	218	170		
CV:		30%	13%	16%	22%	25%	19%	18%		

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^a White mold ratings: 1= less than 10% infection, 5= greater than 60% infection

^b Lodging Scores: 1= very erect, 5= pods and stems on the ground

Table 2. Black bean varieties, average maturity, yields at four county locations in 2019, average yields by variety for Bay, Huron, Sanilac, and Tuscola County in 2019 (1-year AVG.), 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.), white mold rating (1-5) and lodging rating (1-5).

VARIETY	DAYS	BAY	HURON	SANILAC	TUSCOLA	1-year AVG.	2-year AVG.	3-year AVG.	WM Rating ^a	Lodging ^b
ZORRO	93-102	1470	2416	3138*	2816	2460	2540	2426	2.6	2.0
ZENITH	93-104	1539	2625*	3282*	2506	2488	2673	2504	2.4	2.0
LORETO	94-104	1123	2721*	2977	3055	2469	2694	2643	3.3	2.0
BLACK CAT	92-100	1595	2535	2750	2790	2418	2618	2552	3.3	2.0
BLACK BEAR	97-104	1466	2657*	3227	3612	2741	2672	2539	3.0	2.0
BLACK TAILS	94-102	1259	2609	2788	3432	2522	2740	2639	3.3	2.5
BLACK BEARD	96-100	1909*	3193*	3782**	3195	3020*	3190*	3040	2.4	2.0
SPECTRE	96-104	1625	2719*	3514*	3190	2762	3122*	3009	1.9	2.5
BL 13505	92-100	1903*	2973*	2793	3047	2679	2743	2652	4.3	2.5
BL 14500	97-106	1979*	3060*	3563*	3563	3041*	3337**	3224**	2.6	2.0
BL 15610	95-106	1546	2524	3739*	3284	2773	2749	-	2.5	2.0
BL 15619	93-104	2069*	2588	2540	2876	2518	2558	-	3.6	2.0
MSU B15447	97-100	1800*	2902*	3508*	3737*	2987*	-	-	3.0	2.0
MSU B16504	95-100	2229**	2845*	3308*	2768	2788	3109*	3074	2.8	2.0
MSU B17922	96-100	1802*	3102*	2963	3568	2859	-	-	2.5	2.0
MSU B18201	96-102	2136*	3282**	3329*	4268**	3254**	-	-	2.6	2.0
MSU B18204	95-100	1609	3000*	2888	2662	2540	-	-	2.6	2.0
MSU B18504	96-100	1675	3099*	3343*	3700*	2954	3068	-	2.6	2.0
GTS B13SR1-1	94-100	1915*	2854*	2193	3152	2529	-	-	3.5	2.0
ADM B2007325	97-99	-	-	2837	3816*	-	-	-	3.8	2.5
ADM B3036368	97-98	-	-	2554	2516	-	-	-	4.3	2.5
ADM B3036381	96-97	-	-	2546	2935	-	-	-	4.5	3.0
ACE	97-98	-	-	2858	3194	-	-	-	3.8	3.0
ECLIPSE	92-96	-	-	2512	3295	-	-	-	4.3	3.0
MEAN:		1718	2827	3039	3207	2726	2779	2775	3.1	2.2
LSD _(0.05) :		439	662	679	568	298	236	160		
CV:		21%	19%	19%	15%	23%	20%	17%		

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^a White mold ratings: 1= less than 10% infection, 5= greater than 60% infection

^b Lodging Scores: 1= very erect, 5= pods and stems on the ground

Table 3. Small Red and Pink Bean varieties, average maturity, yields at four county locations in 2019, average yields by variety for Bay, Huron, Sanilac, and Tuscola County in 2019 (1-year AVG.), 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.), white mold rating (1-5) and lodging rating (1-5).

VARIETY	DAYS	BAY	HURON	SANILAC	TUSCOLA	1-year AVG.	2-year AVG.	3-year AVG.	WM Rating ^a	Lodging ^b
<i>VIPER</i>	93-104	1882*	2610*	3608*	3885*	2996**	3162*	3175**	3.8	2.5
<i>RUBY</i>	92-104	1472*	2644*	2970	2855	2485	2710	2725	3.8	4.0
<i>CALDERA</i>	97-108	1578*	2299*	3641**	4237**	2939*	3020*	3084*	3.0	2.5
<i>CAYENNE</i>	91-100	1859*	2777*	2942	3328	2727*	3097*	3032*	2.0	2.5
<i>MSU R17603</i>	96-104	1594*	2880**	3560*	2990	2756*	3207**	-	3.0	2.5
<i>MSU R17604</i>	97-105	1378	2450*	3130*	3302	2565	-	-	2.4	3.5
<i>MSU R17605</i>	95-104	1537*	2453*	3043*	3422	2614	-	-	2.5	3.0
<i>PROVITA 16686</i>	91-101	1801*	1702	2503	3955*	2490	-	-	3.9	3.0
<i>PROVITA 17835</i>	93-102	1865**	2453*	2919	2704	2485	-	-	2.8	3.0
<i>PROVITA 17837</i>	90-103	1335	2682*	3167*	3177	2590	-	-	3.0	2.5
<i>PROVITA 17839</i>	93-102	1294	2461*	2982	2528	2316	-	-	3.4	2.5
<i>ROSETTA PINK</i>	93-105	1542*	2561*	2075	2021	2050	2561	2528	1.9	2.0
<i>S18904</i>	95-104	1705*	2256	3067*	2757	2446	-	-	2.1	2.5
MEAN:		1603	2479	3047	3166	2574	2960	2909	2.9	2.8
LSD _(0.05) :		450	607	646	536	293	220	172		
CV:		23%	21%	17%	14%	25%	18%	18%		

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^a White mold ratings: 1= less than 10% infection, 5= greater than 60% infection

^b Lodging Scores: 1= very erect, 5= pods and stems on the ground

Table 4. Pinto bean varieties, average maturity, yields at four county locations in 2019, average yields by variety for Bay, Huron, Sanilac, and Tuscola County in 2019 (1-year AVG.), 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.), white mold rating (1-5) and lodging rating (1-5).

VARIETY	DAYS	BAY	GRATIOT	HURON	MONTCALM	SANILAC	1-year AVG.	WM Rating ^a	Lodging ^b
LA PAZ	90-95	1922*	2127	2271*	2291	2934**	2309	4.6	3.0
MSU P16901	95-102	2188*	2671**	2368*	2639	2322*	2438*	4.4	3.5
MSU P17510	93-104	2223**	2250*	2618**	3384**	2792*	2653**	3.1	2.0
MSU P18602	96-102	1345	1862	2316*	1394	2661*	1916	4.3	3.0
WINDBREAKER	87	-	-	2071	-	-	-	-	-
SV6139GR	89	-	-	2496*	-	-	-	-	-
SV6533GR	88	-	-	2422*	-	-	-	-	-
MEAN:		1920	2228	2366	2427	2677	2329	4.1	2.9
LSD_(0.05):		424	483	417	304	1500	318		
CV:		17%	16%	14%	cv-5%	43%	26%		

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^aWhite mold ratings: 1= less than 10% infection, 5= greater than 60% infection

^bLodging Scores: 1= very erect, 5= pods and stems on the ground

Table 5. Great Northern bean varieties, average maturity, yields at four county locations in 2019, average yields by variety for Bay, Huron, Sanilac, and Tuscola County in 2019 (1-year AVG.), 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.), white mold rating (1-5) and lodging rating (1-5).

VARIETY	DAYS	BAY	GRATIOT	MONTCALM	TUSCOLA	1-year AVG.	WM Rating ^a	Lodging ^b
POWDERHORN	90-92	883	1295	3097*	1229	1626	5.0	2.0
MSU G16351	98-105	2066**	2627*	3142*	3204*	2760*	3.0	2.0
MSU G17410	94-102	2001*	2845**	3818**	3416**	3020**	3.0	2.0
ARIES GN	90-92	1246	1588	3160*	1748	1936	5.0	2.0
GN 13172	97-103	1525*	2331	2740	3213*	2452	4.0	3.0
MEAN:		1544	2137	3191	2562	2359	4.0	2.2
LSD_(0.05):		625	421	849	742	365		
CV:		37%	15%	23%	24%	29%		

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^aWhite mold ratings: 1= less than 10% infection, 5= greater than 60% infection

^bLodging Scores: 1= very erect, 5= pods and stems on the ground

Table 6. Cranberry bean varieties, average days maturity, yields at Gratiot (Dry Land) and Montcalm (Irrigated) county locations in 2019, average yields for 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.) for Dry Land and Irrigated locations, and white mold rating (1-5).

VARIETY	DAYS	GRATIOT	MONTCALM	Irrigated 2-year AVG.	Irrigated 3-year AVG.	Dry Land 2-year AVG.	Dry Land 3-year AVG.	WM Rating ^a
<i>ETNA</i>	88-91	707	4109**	3512*	3335	1803	1941	1.0
<i>CHIANTI</i> ***	96-99	731	3780*	3607*	3365	1918	2411	2.0
<i>BELLAGIO</i> ***	102-104	1585*	3405	3568*	3336	2263	2441	3.0
<i>SV3709GC</i>	88-90	1382*	3970*	-	-	-	-	1.0
<i>VERO</i>	88-91	-	3468	3276	3368	-	-	2.0
<i>GTS Red Cran R172</i>	87-90	1719*	2721	-	-	-	-	1.0
<i>CR 151085</i>	95-102	1773*	3601*	3909**	3783**	2460*	2674*	3.0
<i>CR 151093</i>	95-102	1853**	3228	3285	3149	2704**	2773**	2.0
<i>CR 151106</i>	95-96	562	3977*	3474*	3226	1739	2030	1.0
<i>CR 16760</i>	90-93	1623*	3566	3345	-	2506*	-	2.0
<i>CR 16761</i>	90-92	1141	3568	3561*	-	2141	-	2.0
<i>CR 16764</i>	88-90	1351	3143	2703	-	2235	-	3.0
<i>CR 16775</i>	96-98	1153	3483	-	-	-	-	1.0
MEAN:		1298	3540	3424	3366	2197	2378	1.8
LSD_(0.05):		492	526	447	396	290	278	
CV:		32%	12%	16%	17%	16%	17%	

***Vine type

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^aWhite mold ratings: 1= less than 10% infection, 5= greater than 60% infection

Table 7. Light Red Kidney bean varieties, average days maturity, yields at Gratiot (Dry Land) and Montcalm (Irrigated) county locations in 2019, average yields for 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.) for Dry Land and Irrigated locations, and white mold rating (1-5).

VARIETY	DAYS	GRATIOT	MONTCALM	Irrigated 2-year AVG.	Irrigated 3-year AVG.	Dry Land 2-year AVG.	Dry Land 3-year AVG.	WM Rating ^a
CALIF ELRK	88-92	1493	3630*	3162	3288*	1808	2049	2.0
CLOUSEAU	92-95	1380	3763**	3581*	3696*	1943	2160	2.0
INFERNO	108-109	2521	2447	3541*	3546*	2853**	2936**	2.0
BIG RED	88-96	1937	3136*	2999	3350*	2018	2211	2.0
RONNIES RED	102-106	2607*	2824	3643*	3762**	2669*	2855*	3.0
RED DAWN	86-91	1491	3654*	3493*	3557*	1854	2102	1.0
LRK 06269	104-105	2202	2982*	3675*	3491*	2209	2321	4.0
LRK 15907	108-109	2577*	2421	2952	3106	2638*	2802*	3.0
LRK 15926	106-109	2142	2426	3037	3016	2312	2521*	4.0
COHO	102-104	2435*	2699	3432*	3182	2443	2291	3.0
MSU K17703	102-103	1922	3372*	3978**	-	2350	-	2.0
MSU K18501	107-108	2642**	2767	-	-	-	-	2.0
ADM L1032326	108-109	-	2594	-	-	-	-	3.0
ADM L4063262	109-110	-	2851	-	-	-	-	3.0
MEAN:		2112	2969	3408	3400	2282	2425	2.6
LSD_(0.05):		390	805	635	478	322	273	
CV:		15%	22%	22%	21%	17%	17%	

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^aWhite mold ratings: 1= less than 10% infection, 5= greater than 60% infection

Table 8. Dark Red Kidney bean varieties, average days maturity, yields at Gratiot (Dry Land) and Montcalm (Irrigated) county locations in 2019 and average yields for 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.) for Dry Land and Irrigated locations, and white mold rating (1-5).

<i>VARIETY</i>	<i>DAYS</i>	<i>GRATIOT</i>	<i>MONTCALM</i>	<i>Irrigated 2-year AVG.</i>	<i>Irrigated 3-year AVG.</i>	<i>Dry Land 2-year AVG.</i>	<i>Dry Land 3-year AVG.</i>	<i>WM Rating^a</i>
<i>RED HAWK</i>	100-102	1877	3708*	3745*	3558*	2123	-	3.0
<i>MONTCALM</i>	102-104	1823	3433*	3685*	3504*	1986	-	2.0
<i>RED ROVER</i>	94-95	1761	3567*	3468	3343*	2023	-	2.0
<i>DYNASTY</i>	106-107	2017	3506*	3923**	3697**	2397*	-	2.0
<i>RED CEDAR</i>	98-99	2099	2684	3140	3018	2263	2673	2.0
<i>MSU K16131</i>	100-102	1928	2637	3219	-	2133	-	2.0
<i>MSU K16136</i>	100-101	1950	3277*	3575*	3681*	2325	-	2.0
<i>CHAPARRAL</i>	101-104	1556	2638	3504	3197	1922	-	3.0
<i>EPIC</i>	103-106	2044	3199*	3415	3360*	2289	3272*	2.0
<i>SPIRE</i>	104-107	2083	2302	3721*	3309	2295	3407**	2.0
<i>RAMPART</i>	92-100	1673	2892	3429	-	2088	-	1.0
<i>DRK 15978</i>	99-104	2652**	2181	3920*	3233	2629**	-	3.0
<i>DRK 15981</i>	102-105	1819	2099	-	-	-	-	2.0
<i>DRK 151011</i>	96-100	2029	2496	3483	3278	2380	-	1.0
<i>ADM D1034333</i>	101	-	3883**	-	-	-	-	1.0
<i>ADM D5004231</i>	102	-	3799*	-	-	-	-	2.0
MEAN:		1951	3019	3556	3380	2219	3117	2.0
LSD_(0.05):		441	707	365	383	277	394	
CV:		19%	19%	12%	17%	15%	18%	

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^aWhite mold ratings: 1= less than 10% infection, 5= greater than 60% infection

Table 9. White Kidney bean varieties, average days maturity, yields at Gratiot (Dry Land) and Montcalm (Irrigated) county locations in 2019, average yields for 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.) for Dry Land and Irrigated locations, and white mold rating (1-5).

VARIETY	DAYS	GRATIOT	MONTCALM	Irrigated 2-year AVG.	Irrigated 3-year AVG.	Dry Land 2-year AVG.	Dry Land 3-year AVG.	WM Rating ^a
<i>BELUGA</i>	105-106	2392**	2659	3083	2983	2365*	-	2.0
<i>SNOWDON</i>	90-92	1418	4243*	3611*	3316	2081*	-	1.0
<i>MSU K16924</i>	94-95	1899*	4317*	4034**	3846**	2234*	2348	1.0
<i>MSU K17804</i>	107-108	2237*	3261	3615*		2468**	-	2.0
<i>MSU K18912</i>	92-94	1549	4451**	-		-	-	2.0
<i>YETI</i>	107-109	1477	3849	3820*	3608*	2261*	-	1.0
MEAN:		1829	3797	3632	3438	2282	-	1.5
LSD_(0.05):		529	374	456	361	389	-	
CV:		23%	8%	15%	15%	20%	-	

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^aWhite mold ratings: 1= less than 10% infection, 5= greater than 60% infection

Table 10. Yellow bean varieties, average days maturity, yields at Gratiot (Dry Land) and Montcalm (Irrigated) county locations in 2019, average yields for 2018-2019 (2-year AVG.), 2017-2019 (3-year AVG.) for Dry Land and Irrigated locations, and white mold rating (1-5).

VARIETY	DAYS	GRATIOT	MONTCALM	Irrigated 2-year AVG.	Dry Land 2-year AVG.	WM Rating ^a
<i>MSU Y16503</i>	107-108	1546	3519*	3154	2177	1.0
<i>MSU Y16507</i>	96-99	1915*	3914**	-	-	2.0
<i>PROVITA 13655</i>	104-106	1917**	3287	-	-	2.0
<i>SVS 0863</i>	105-106	1840*	3387	-	-	4.0
MEAN:		1805	3527	-	-	2.3
LSD_(0.05):		324	520	-	-	
CV:		14%	15%	-	-	

**Highest yielding variety within column

*Yield not statistically different than the highest yielding variety within column

^aWhite mold ratings: 1= less than 10% infection, 5= greater than 60% infection