Frost Dates observed (recorded) at the Saginaw Valley Dry Bean and Sugar Beet Research Farm

| <u>YEAR</u> ` | DATE | |
|----------------|-------|------------------------------------|
| 1976 | 9-24 | 26 |
| 1977 | 10-7 | 29 |
| 1978 | 10-8 | 31 |
| 1979 | 9-23 | 31 |
| 1980 | 9-27 | 31 |
| 1981 | 10-3 | 31 |
| 1982 | 9-19 | 32 10-16 (32) next frost |
| 1983 | 9-24 | 31 |
| 1984 | 10-1 | 28 |
| 1985 | 10-3 | 30 |
| 1986 | 10-18 | 27 flood year |
| 1987 | 10-1 | 22 |
| 1988 | 10-6 | 27 |
| 1989 | 9-24 | 28 killed beans, wet late planting |
| 1990 | 9-18 | 31 |
| 1991 | 9-22 | 29 |
| 1992 | 9-23 | 29 |
| 1993 | 9-30 | 29 |
| 1994 | 10-10 | 29 |
| 1995 | 9-22 | 25 |
| 1996 | 10-5 | 27 |
| 1997 | 10-15 | 30 |
| 1998 | 11-2 | 32 |
| 1999 | 10-3 | 32 |
| 2000 | 9-28 | 32 |
| 2001 | 10-7 | 28 |
| 2002 | 10-14 | 26 |
| 2003 | 10-1 | 29 |
| 2004 | 9-30 | 31 |
| 2005 | 10-17 | 29 |
| 2006 | 9-29 | 31 |
| 2007 | 10-14 | 29 |
| 2008 | 10-04 | 32 |
| 4 4 1 1 00 - 1 | | |

First date at or below 32 degrees.

Greg Varner-----April 6, 2009

29-32 degrees is not considered a killing freeze in the Michigan dry bean area.

Hours of below freezing temperature is very important in determining damage.

The trend since 1996 shows little to no frost problems until October.