

## 2024 BSDL Sugar Beet Production Challenges Survey (U.S.)

	Total Average Value Lost Per Production Challenge		Total Challenged Acres	
	Without Management	With Management	Without Management	With Management
<b>Abiotic - Total</b>	<b>\$ 1,859,569,517</b>	<b>\$ 788,812,685</b>	<b>3,265,226</b>	<b>2,417,168</b>
Drought Stress	\$ 532,392,423	\$ 138,886,704	852,642	306,042
Heat Stress	\$ 513,120,523	\$ 261,324,373	864,700	732,542
Frost	\$ 419,684,148	\$ 179,265,804	704,342	591,342
Excess water	\$ 385,122,423	\$ 203,835,804	797,542	742,242
Salt	\$ 9,250,000	\$ 5,500,000	46,000	45,000
<b>Disease - Total</b>	<b>\$ 3,800,813,698</b>	<b>\$ 478,776,674</b>	<b>4,899,538</b>	<b>1,834,450</b>
Cercospora	\$ 931,422,750	\$ 157,303,936	966,542	642,719
Rhizomania	\$ 790,250,015	\$ 28,350,000	1,010,219	111,500
Rhizoctonia	\$ 673,623,933	\$ 138,500,000	887,377	456,500
Aphanomyces	\$ 455,425,000	\$ 115,770,000	739,000	383,500
Curly Top	\$ 365,280,000	\$ 250,000	261,200	5,000
Nematode	\$ 234,210,000	\$ 3,300,000	304,200	16,000
Alternaria	\$ 177,232,000	\$ 4,581,280	361,000	112,000
Fusarium	\$ 138,350,000	\$ 29,521,458	214,000	85,231
Powdery Mildew	\$ 35,020,000	\$ 1,200,000	156,000	22,000
<b>Insect - Total</b>	<b>\$ 657,834,000</b>	<b>\$ 141,377,500</b>	<b>1,024,800</b>	<b>400,750</b>
Root Maggot	\$ 354,544,000	\$ 71,597,500	453,300	221,750
Aphids (Root & Black Bean)	\$ 255,065,000	\$ 69,505,000	362,000	170,500
Wireworm	\$ 34,600,000	\$ 125,000	77,000	2,500
Lygus	\$ 13,625,000	\$ 150,000	132,500	6,000
<b>Other - Total</b>	<b>\$ 1,840,464,620</b>	<b>\$ 606,888,000</b>	<b>1,970,200</b>	<b>1,416,000</b>
Weed Control	\$ 1,120,354,620	\$ 286,918,000	1,102,200	676,000
Storage	\$ 720,110,000	\$ 319,970,000	868,000	740,000
<b>Grand Total</b>	<b>\$ 8,158,681,835</b>	<b>\$ 2,015,854,859</b>	<b>11,159,764</b>	<b>6,068,368</b>

Market	2024 Acres
Amalgamated Sugar	180,000
American Crystal	412,219
Michigan Sugar	145,000
Minn-Dak	94,823
SMBSC	120,000
Spreckels Sugar	25,000
Western Sugar	112,000
Wyoming Sugar	13,158
<b>Total</b>	<b>1,102,200</b>

Challenged Acres <i>without management</i>	Production acres that will suffer an economic production loss due to a challenge if the challenge is not managed
Challenged Acres <i>with management today</i>	Production acres that suffer an economic production loss due to a challenge today with the management of the challenge employed
Economic production loss	A loss in sugar yield that exceeds 5% of gross grower payment for the acreage by each cooperative
Management of challenge	An applied crop input, seed treatment, agronomic practice or genetic trait that reduces the impact of the economic production loss from a challenge
Market Acres	Average production acres as set by each cooperative
Future Risk of Challenge	Assessment of the management of the challenge based on what you know
Agronomic practice	Crop rotation, soil amendments, cultivation
Economic production loss	Calculated based on each cooperative's average tons/acre and average price