

Table 6. Yield and Growth metrics for the Date of Planting and Nitrogen Trial for the University of Massachusetts Agricultural Research Farm, South Deerfield, MA. 2015-2016

DOP	Agronomic									
	Fall N (lbs/ac)	Spring N (lbs/ac)	Yield (bu/ac)	NUE (g grain/g N)	Test Weight (kg/hL)	TGW (g)	Germin ation <sup>2</sup> (%)	Protein (%)	Falling number (sec.)	DON (ppm)
Sept. 5	25	25	70.6	67.8	59.2	44.1	92.7	9.3	104.8	0.3
		45	78.8	40.5	45.0	33.6	94.7	9.6	89.0	0.2
		65	74.1	39.5	58.0	42.8	86.3	10.1	80.3	0.3
	0	25	65.2	93.9	44.4	33.5	96.0	8.7	135.7	0.3
		45	74.0	78.9	58.6	43.4	92.7	9.5	82.5	0.3
		65	83.9	62.0	59.2	43.6	89.7	9.8	71.3	0.3
		0	58.2	---	43.9	33.5	97.5	8.9	160.3	0.2
Sept. 15	25	25	69.2	66.4	58.9	46.5	88.0	8.8	152.8	0.2
		45	92.7	63.5	63.6	34.9	97.0	8.9	142.8	0.4
		65	83.0	44.3	96.7	46.8	95.7	9.0	139.5	0.2
	0	25	84.2	161.7	59.0	46.2	96.7	9.2	149.0	0.1
		45	79.4	84.7	60.6	45.5	96.7	9.0	143.3	0.2
		65	78.3	57.8	59.2	46.0	97.3	9.5	140.8	0.2
		0	51.3	---	58.3	45.6	98.0	9.1	190.8	0.3
Sept. 15	25	25	83.1	79.8	59.9	46.9	97.0	9.4	172.3	0.4
		45	88.6	60.8	60.7	46.1	101.3	9.3	127.0	0.4
		65	87.3	46.6	59.4	46.3	94.7	10.2	118.5	0.2
	0	25	77.1	148.1	59.7	46.8	96.0	9.2	156.3	0.3
		45	79.1	84.4	60.9	46.3	96.7	9.7	134.5	0.1
		65	77.9	57.5	61.0	47.2	95.7	10.0	157.5	0.6
		0	63.7	---	59.4	47.4	96.3	9.4	168.5	0.2
<b>DOP</b>										
Sept. 5			72.1	63.8	52.6	39.2	92.8	9.4	103.4	0.3
Sept. 15			76.9	79.7	65.2	44.5	95.6	9.1	151.3	0.2
Sept. 25			79.5	79.5	60.2	46.7	96.8	9.6	147.8	0.3
<b>Fall N (lbs/ac)</b>										
25			72.7	92.1	57.0	43.7	95.8	9.4	140.9	0.2
0			80.8	56.6	62.4	43.1	94.1	9.4	125.2	0.3
<b>Spring N (lbs/ac)</b>										
25			74.9	102.9	56.8	44.0	94.4	9.1	145.1	0.2
45			82.1	68.8	58.2	41.6	96.5	9.3	119.8	0.3
65			80.8	51.3	65.6	45.4	93.2	9.8	118.0	0.3
0			57.7	---	53.9	42.2	97.3	9.2	173.2	0.2
<b>Significance<sup>1</sup> by main factors</b>										
DOP			NS	NS	NS	NS	NS	*	*	
Fall N			t	NS	NS	NS	NS	NS	NS	
Spring N			*	***	NS	NS	NS	NS	NS	
DOPxFall N			NS	NS	NS	NS	NS	NS	NS	
DOPxSpring N			NS	t	NS	NS	t	NS	NS	
Fall NxSpring N			NS	*	NS	NS	NS	NS	NS	

<sup>1</sup>t indicates P≤0.1, \*indicates a significant relationship or difference (P≤0.05), \*\*indicates a highly significant relationship or difference (P≤0.01), \*\*\*(P≤0.001) indicates a very highly significant relationship or difference

<sup>2</sup>Three replicates reported for highly abnormal germination rates in one of the 4 replicates.