



Nitrogen Rate Determination for Wheat at GS 30

Tissue sampling with corresponding biomass at GS 30 (Feekes 5) is used to determine optimum spring N rates.

After receiving the N.C.D.A.&C.S. plant tissue report (Fig. 1), find the N % and biomass values. Biomass is reported as dry weight (DW) on the report.

Fig. 1

N (%)	P (%)	K (%)	Ca (%)
2.21	0.24	2.57	0.25

N	P	K	Ca
28-L	54-S	51-S	52-S

Other Results

Na (%)	Cl (%)	C (%)	DW (g)
0.00	-	-	21.1

Determine the biomass density of your wheat stand using the DW and planted row spacing (Fig. 2).

- Blue = Low biomass field
- Red = Medium biomass field
- Green = High biomass field

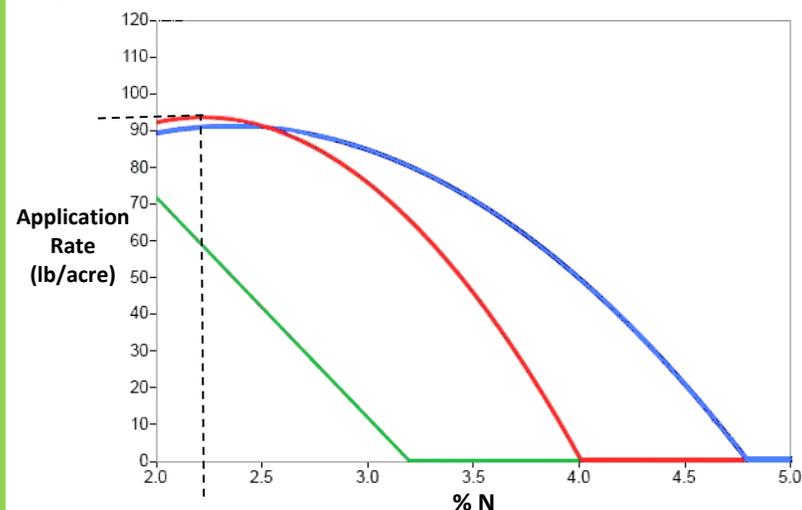
In this example, the biomass density of 21 g is Medium and you should use the **Red** curve in Figure 3.

Fig. 2.

Dry weight (g)	Row spacing in inches			
	5	6	7	8
≤ 10	Blue	Blue	Blue	Blue
15	Red	Red	Blue	Blue
20	Red	Red	Red	Red
25	Green	Red	Red	Red
30	Green	Green	Red	Red
35	Green	Green	Green	Red
≥ 40	Green	Green	Green	Green

Use the N % of 2.2 from the N.C.D.A.&C.S. plant tissue report and the **Red** curve to determine the optimum application rate of ~ 90 lb/acre.

Fig. 3



Adapted from Ch. 6 of the NCSU Small Grains Production Guide.