

SMN Calculation Worksheet

Step 7: Crop N requirement (R)

Enter crop N requirement (R) from **line (1)** on previous page

R in kg N/ha = (7)

Step 8: Credit ammonium in SMN test (SMN_{AMM}) in kg N/ha

Enter SMN ammonium test value in ppm _____ (a)

If (a) \leq 9, then $SMN_{AMM} = 0$

If (a) $>$ 9, then $SMN_{AMM} = [\text{_____ (a) - 9}] \times 1.9 = \text{_____ (b)}$

SMN_{AMM} in kg N/ha = (enter 0 or (b) as appropriate) = (8)

Step 9: Credit nitrate in SMN test (SMN_{NIT}) in kg N/ha

Enter SMN nitrate test value in ppm _____ (a)

If (a) \leq 6, then $SMN_{NIT} = 0$

If (a) $>$ 6, then $SMN_{NIT} = [\text{_____ (a) - 6}] \times 1.9 = \text{_____ (b)}$

SMN_{NIT} in kg N/ha = (enter 0 or (b) as appropriate) = (9)

Step 10: Credit soil organic matter content (S)

Enter soil organic matter credit (S) from **line (5)** on previous page

S in kg N/ha = (10)

Step 11: Calculate nitrogen recommendation (F_{SMN}) based on the SMN test in kg N/ha

This is your fertilizer nitrogen recommendation using the SMN test in kg N/ha

F_{SMN} in kg N/ha = (7) - (8) - (9) - (10) = (11)

Step 12: Compare to general fertilizer nitrogen recommendation

Enter F_{SMN} from **line 11** _____ (a)

Enter F_N from **line 6** on previous page _____ (b)

Fertilizer nitrogen recommendation is (a) or (b), whichever is lower = (12)

(Multiply F_N by 0.89 to get fertilizer nitrogen recommendation in units of lb N/ac)