

# Normal Tissue Test Levels by Growth Stage

Midwest Laboratories, Omaha, Nebraska

| Crop | Midwest Stage | Growth Stage |                         | N    | S    | P    | K    | Mg    | Ca    | Na    | Fe  | Al  | Mn  | B  | Cu  | Zn |
|------|---------------|--------------|-------------------------|------|------|------|------|-------|-------|-------|-----|-----|-----|----|-----|----|
| Corn | 1             | V2           | 2 leaves                | 4.50 | 0.19 | 0.48 | 4.00 | 0.150 | 0.340 | 0.010 | 190 | 105 | 114 | 25 | 7   | 60 |
| Corn | 2             | V4           | 4 leaves                | 4.30 | 0.22 | 0.49 | 3.70 | 0.170 | 0.350 | 0.009 | 185 | 105 | 110 | 22 | 7.5 | 58 |
| Corn | 3             | V6           | 6 leaves                | 4.10 | 0.24 | 0.49 | 3.50 | 0.180 | 0.368 | 0.008 | 174 | 105 | 103 | 20 | 7.5 | 55 |
| Corn | 4             | V8           | 8 leaves                | 3.90 | 0.25 | 0.46 | 3.20 | 0.190 | 0.385 | 0.007 | 164 | 105 | 93  | 18 | 7.5 | 50 |
| Corn | 5             | V10          | 10 leaves               | 3.75 | 0.25 | 0.43 | 2.90 | 0.198 | 0.405 | 0.007 | 150 | 105 | 88  | 17 | 7.5 | 48 |
| Corn | 6             | V12          | 12 leaves               | 3.60 | 0.24 | 0.40 | 2.60 | 0.205 | 0.420 | 0.008 | 141 | 105 | 83  | 16 | 7.6 | 45 |
| Corn | 7             | V14          | 14 leaves               | 3.45 | 0.24 | 0.38 | 2.35 | 0.207 | 0.485 | 0.008 | 137 | 105 | 81  | 14 | 7.6 | 40 |
| Corn | 8             | VT           | Tassel                  | 3.35 | 0.23 | 0.35 | 2.25 | 0.210 | 0.455 | 0.009 | 134 | 105 | 78  | 12 | 7.7 | 35 |
| Corn | 9             | R1           | Silking / Early Pollin. | 3.15 | 0.21 | 0.33 | 2.20 | 0.212 | 0.470 | 0.010 | 134 | 105 | 78  | 11 | 7.8 | 32 |
| Corn | 10            | R1           | Pollination             | 2.95 | 0.20 | 0.31 | 2.15 | 0.215 | 0.485 | 0.011 | 136 | 105 | 79  | 10 | 7.9 | 28 |
| Corn | 11            | R2           | Blister / Brown Silks   | 2.80 | 0.19 | 0.29 | 2.05 | 0.218 | 0.503 | 0.013 | 140 | 105 | 82  | 10 | 8   | 28 |
| Corn | 12            | R4           | Early Dough             | 2.65 | 0.18 | 0.28 | 2.00 | 0.220 | 0.520 | 0.014 | 144 | 105 | 85  | 10 | 8   | 28 |
| Corn | 13            | R4           | Dough                   | 2.50 | 0.16 | 0.26 | 2.00 | 0.210 | 0.535 | 0.015 | 150 | 105 | 89  | 9  | 8   | 27 |
| Corn | 14            | R5           | Early Dent              | 2.32 | 0.15 | 0.24 | 1.95 | 0.205 | 0.565 | 0.014 | 152 | 105 | 90  | 9  | 8   | 25 |
| Corn | 15            | R5           | Dent                    | 2.15 | 0.15 | 0.22 | 1.90 | 0.190 | 0.570 | 0.013 | 152 | 105 | 90  | 8  | 8   | 23 |
| Corn | 16            | R6           | Full Dent               | 2.00 | 0.14 | 0.21 | 1.85 | 0.180 | 0.580 | 0.010 | 150 | 105 | 89  | 8  | 8   | 22 |

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|--------|---------------|--------------|--|-----|------|-----|-----|-----|-----|------|-----|----|----|----|----|----|
| Cotton | 0             | all stages   |  | 3.3 | 0.46 | 0.5 | 2.9 | 0.6 | 3.9 | 0.12 | 120 | 95 | 85 | 50 | 12 | 35 |

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|---------|---------------|-------------------------|--|-----|------|------|------|------|------|-------|----|----|----|----|----|----|
| Soybean | 1             | All Vegetative Growth   |  | 5.2 | 0.36 | 0.38 | 2.20 | 0.50 | 1.20 | 0.02  | 95 | 60 | 58 | 41 | 13 | 39 |
| Soybean | 2             | All Reproductive Growth |  | 4.4 | 0.3  | 0.32 | 1.87 | 0.42 | 1.02 | 0.017 | 80 | 51 | 49 | 35 | 11 | 33 |

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|-------|---------------|-----------------------|--|-----|------|-------|-----|------|------|------|----|----|----|----|----|----|
| Wheat | 1             | Tillering             |  | 4.2 | 0.3  | 0.403 | 3.5 | 0.21 | 0.42 | 0.02 | 60 | 50 | 45 | 10 | 9  | 35 |
| Wheat | 2             | Jointing              |  | 3.2 | 0.28 | 0.38  | 2.8 | 0.2  | 0.45 | 0.02 | 60 | 50 | 42 | 10 | 9  | 32 |
| Wheat | 3             | Flag Leaf, Boot       |  | 2.8 | 0.28 | 0.36  | 2.6 | 0.18 | 0.45 | 0.02 | 60 | 50 | 42 | 10 | 9  | 32 |
| Wheat | 4             | Heading, Bloom, Dough |  | 2.5 | 0.19 | 0.35  | 1.4 | 0.12 | 0.20 | 0.02 | 60 | 50 | 40 | 10 | 4  | 25 |