

## NITROGEN CONTENT AND CARBON-TO-NITROGEN RATIOS

### For Composting Waste Materials

| <b>Material</b>         | <b>Nitrogen (% of Total Weight)</b> | <b>Ratio of Carbon to Nitrogen (C:N)</b> |
|-------------------------|-------------------------------------|--|
| Activated sludge        | 5-6                                 | 6:1                                      |
| Alfalfa                 | 2.4-3                               | 16-20:1                                  |
| Blood                   | 10 – 14                             | 3:1                                      |
| Bone meal               |                                     | 3.5:1                                    |
| Bread                   | 2.10                                |  |
| Buttercup               | 2.2                                 | 23:1                                     |
| Cabbage                 | 3.6                                 | 12:1                                     |
| Carrot, whole           | 1.6                                 | 27:1                                     |
| Clover, red             | 1.8                                 | 27:1                                     |
| Cocksfoot               | 2.55                                | 19:1                                     |
| Cottonseed meal         |                                     | 5:1                                      |
| Fern                    | 1.15                                | 43:1                                     |
| Fish scrap              | 6.5 – 10                            | 5.1:1                                    |
| Garbage, green          | 3                                   | 18:1                                     |
| Garbage, raw            | 2.15                                | 25:1                                     |
| Kentucky bluegrass      | 2.4                                 | 19:1                                     |
| Lawn clippings, young   | 4                                   | 12:1                                     |
| Lettuce                 | 3.7                                 |  |
| Manure, farmyard (avg.) | 2.15                                | 14:1                                     |
| Manure, chicken         | 3.2                                 | 7:1                                      |

| <b>Material</b>          | <b>Nitrogen (% of Total Weight)</b> | <b>Ratio of Carbon to Nitrogen (C:N)</b> |
|--------------------------|-------------------------------------|--|
| Manure, cow              | 1.7                                 | 18:1                                     |
| Manure, horse            | 2.3                                 | 25:1                                     |
| Manure, human            | 5.5 – 6.5                           | 6-10: 1                                  |
| Manure, pig              | 3.75                                |  |
| Manure, poultry          | 6.3                                 | 15:1                                     |
| Manure, sheep            | 3.75                                |  |
| Manure, steer            | 1.35                                | 25.3:1                                   |
| Meat scraps              | 5.1                                 |  |
| Milorganite(TM)          |                                     | 5.4:1                                    |
| Mustard                  | 1.5                                 | 26:1                                     |
| Newspaper                | .05                                 | 812:1                                    |
| Oat straw                | 1.05                                | 48:1                                     |
| Onion                    | 2.65                                | 15:1                                     |
| Peanut hull meal         |                                     | 11:1                                     |
| Pepper                   | 2.6                                 | 15:1                                     |
| Pigweed (Amaranthus sp.) | 3.6                                 | 11:1                                     |
| Potato tops              | 1.5                                 | 25:1                                     |
| Purslane                 | 4.5                                 | 8:1                                      |
| Ragwort                  | 2.15                                | 21:1                                     |
| Sawdust, raw             | . 11                                | 511:1                                    |
| Sawdust, rotted          | .25                                 | 208:1                                    |
| Seaweed                  | 1.9                                 | 19:1                                     |

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|------------------------|-------------------------------------|--|
| Sewage, fresh          |                                     | 11:1                                     |
| Slaughterhouse wastes  | 7-10                                | 2:1                                      |
| Soybean meal           |                                     | 5:1                                      |
| Timothy grass          | .85                                 | 58:1                                     |
| Tobacco                | 3                                   | 13:1                                     |
| Tomato                 | 3.3                                 | 12:1                                     |
| Turnip tops            | 2.3                                 | 19:1                                     |
| Turnip, whole          | 1                                   | 44:1                                     |
| Urine                  | 15-18                               | .8:1                                     |
| Vegetables, non-legume | 2.54                                | 11-19: 1                                 |
| Wheat flour            | 1.7                                 |  |
| Wheat straw            | .3                                  | 128:1                                    |
| Wood, white fir        | .06                                 | 767:1                                    |

Sources:

Robert Kourik, *Designing and Maintaining Your Edible Landscape Naturally*, Metamorphic Press, 1986, ISBN 0-9615848-0-7.

J. I. Rodale and staff, *Complete Book of Composting*, Rodale Books, 1960.