

Carbon to Nitrogen Ratios of Various Waste Materials

Material	C:N Ratio	Material	C:N Ratio
Alfalfa meal	15	Newspaper	400-850
Animal tankage	7	Oat straw	50-100
Apple pomace	48	Paper	125-180
Aquatic plants	15-35	Paper fiber sludge	250
Blood meal	3	Paper mill sludge	55
Cardboard (corrugated)	560	Paper pulp	90
Castor pomace	8	Paunch manure	20-30
Cocoa shells	22	Pig manure	10-20
Coffee grounds	20	Potato tops	28
Compost	15-20	Potatoes (culled)	18
Corn silage	35-45	Poultry manure	5-15
Corn wastes	60-120	Rice hulls	110-130
Cottonseed meal	7	Sawdust	200-750
Cow manure	10-30	Sawmill waste	170
Crab/Lobster wastes	4-4.5	Seaweed	5-27
Cranberry wastes	30-60	Seed meals	7
Fish wastes	2.5-5.5	Sewage sludge	5-16
Food wastes	14-16	Sheep manure	13-20
Fruit wastes	20-50	Shrimp wastes	3.5
Garden wastes	5-55	Shrub trimmings	53
Grass clippings	9-25	Slaughterhouse wastes	2-4
Grass hay	32	Softwood bark	100-1000
Hardwood bark	100-400	Softwood chips, shavings, etc.	200-1300
Hardwood chips, shavings, etc.	450-800	Soil	12
Hoof and horn meal	3	Soybean meal	4-6
Horse manure	22-50	Tree trimmings	16
Leaves	40-80	Turkey litter	16
Legume hay	15-19	Vegetable wastes	11-19
Linseed meal	8	Wheat straw	100-150

To calculate C:N ratio, divide OM (value derived by combustion) by 1.72. The result equals carbon. Then divide the amount of N into the amount of C and that will be C:N where N = 1.