

**Table B-11. Status for Organic Production, Mineral Nutrient Value, and Relative Availability of Various Materials**  
Check with your certifying agency before using any of the listed materials, as the status for organic production may have changed.

Material <sup>a</sup>	Status for Organic Production <sup>b</sup>	Percent Nutrients <sup>c</sup>			Relative Availability
		N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	
Animal Tankage (dry)	Allowed	7	10	0.5	Medium
Bone Meal (raw)	Allowed	2 to 6	15 to 27	0	Slow
Bone Meal (steamed)	Allowed	0.7 to 4.0	18 to 34	0	Slow Medium
Cocoa Shell Meal	Allowed	2.5	1.0	2.5	Slow
Compost (not fortified)	Allowed <sup>d</sup>	1.5 to 3.5	0.5 to 1.0	1.0 to 2.0	Slow
Cottonseed Meal (dry)	Allowed <sup>e</sup>	6	2.5	1.7	Slow Medium
Dried Blood (dry)	Allowed	12	1.5	0.57	Medium Rapid
Fish Emulsion	Allowed	5	2	2	Rapid
Fish Meal (dry)	Allowed	14	4	0	Slow
Fish Scrap (dry)	Allowed	3.5 to 12	1 to 12	0.08 to 1.6	Slow
Garbage Tankage (dry)	Allowed	2.7	3	1	Very Slow
Grain Straw	Allowed	0.6	0.2	1.1	Very Slow
Guano (Bat)	Restricted <sup>f</sup>	5.7	8.6	2	Medium
Kelp <sup>g</sup>	Allowed	0.9	0.5	4 to 13	Slow
Manure <sup>h</sup> (fresh) - Cattle	Restricted <sup>i</sup>	0.25	0.15	0.25	Medium
Manure <sup>h</sup> (fresh) - Horse	Restricted <sup>i</sup>	0.3	0.15	0.5	Medium
Manure <sup>h</sup> (fresh) - Sheep	Restricted <sup>i</sup>	0.6	0.33	0.75	Medium
Manure <sup>h</sup> (fresh) - Swine	Restricted <sup>i</sup>	0.3	0.3	0.3	Medium
Manure <sup>h</sup> (fresh) - Poultry (75%)	Restricted <sup>i</sup>	1.5	1	0.5	Medium Rapid
Manure <sup>h</sup> (fresh) - Poultry (50%)	Restricted <sup>i</sup>	2	2	1.0	Medium Rapid
Manure <sup>h</sup> (fresh) - Poultry (30%)	Restricted <sup>i</sup>	3	2.5	1.5	Medium Rapid
Manure <sup>h</sup> (fresh) - Poultry (15%)	Restricted <sup>i</sup>	6	4	3	Medium Rapid
Marl	Allowed	0	2	4.5	Very Slow
Mushroom Compost <sup>j</sup>	Allowed <sup>k</sup>	0.4 to 0.7	5.7 to 6.2	0.5 to 1.5	Slow
Peanut Hulls	Allowed	1.5	0.12	0.78	Slow
Peat and Muck	Allowed <sup>l</sup>	1.5 to 3.0	0.25 to 0.5	0.5 to 1.0	Very Slow
Pomaces <sup>m</sup> - Apple (fresh)	Allowed	0.17 to 0.3	0.4 to 0.7	0.2 to 0.6	Slow
Pomaces <sup>m</sup> - Apple (dry)	Allowed	0.7 to 0.9	1.2 to 2.1	0.6 to 1.8	Slow
Pomaces <sup>m</sup> - Castor	Allowed	5.0	1.0	1.0	Slow
Pomaces <sup>m</sup> - Winery	Allowed	1.5	1.5	0.80	Slow
Sawdust	Allowed <sup>n</sup>	4	2	4	Very Slow
Soybean Meal (dry)	Allowed	6.7	1.6	2.3	Slow Medium
Tobacco Stems (dry)	Allowed	2	0.7	6.0	Slow
Wood Ashes <sup>o</sup>	Allowed <sup>p</sup>	0	1 to 2	3 to 7	Rapid

<sup>a</sup> Some materials may not be obtainable because of restricted sources.

<sup>b</sup> Must be produced in accordance with the National Organic Standard to be allowed. Organic status was determined through listing with the Organic Materials Review Institute (OMRI; <https://www.omri.org/>). Brand used may affect allowability; check with your certifier before using any product to avoid compromising your certification.

<sup>c</sup> The percentage of plant nutrients is highly variable, mean percentages are listed.

<sup>d</sup> Must be produced in accordance with the National Organic Standards to be used in organic production.

<sup>e</sup> Brand used must not be derived from genetically modified cotton or contain prohibited substances.

<sup>f</sup> Allowed guano is decomposed and dried deposits from wild bats or birds. Must meet requirements for using raw manure.

<sup>g</sup> Contains common salt, sodium carbonates, sodium and potassium sulfates.

<sup>h</sup> Plant nutrients are available during year of application. Nutrient content varies with the amount of straw and method of storage.

<sup>i</sup> Uncomposted or raw animal manure must be used on fields with crops not to be consumed by humans or incorporated into the soil a minimum of 90 days before harvesting a product to be consumed by humans provided that the edible portion of the crop does not contact the soil or integrated into the soil a minimum of 120 days before harvesting a product to be consumed by humans that does come into contact with the soil. Using sewage sludge is prohibited in certified organic production.

<sup>j</sup> Use only after composting in compliance with the National Organic Standard. Fresh mushroom compost is usually too high in soluble salts.

<sup>k</sup> Must meet compost requirements.

<sup>l</sup> Not allowed if contains synthetic wetting agents.

<sup>m</sup> Plant nutrients are highly variable, depending on the efficiency and the processing techniques at the processing plant.

<sup>n</sup> Allowed only if wood is untreated and unpainted.

<sup>o</sup> Potash content depends upon tree species burned. Wood ashes are alkaline, contain about 32% CaO.

<sup>p</sup> Only from untreated and unpainted wood. Wood stove ash - only if not contaminated with colored paper, plastics, or other synthetic sources.