

Mulch Comparison Chart

Material	Weed Suppression	Moisture Retention	Runoff Control	Matting Risk	Washes Away in Heavy Rain	Soil Enrichment	Insulation (Temp Buffer)	Best Use in Landscape
Arborist wood chips	✔ Excellent (coarse)	✔ Excellent	✔ Excellent	Low	Low	✔ Excellent (slow release)	✔ High	Trees, shrubs, perennials; long-term beds
Hardwood mulch (shredded bark)	✔ Good	✔ Good	✔ Good	Low	⚠ May move on slopes	⚠ Moderate	✔ Good	Ornamental beds, pathways
Pine needles	⚠ Moderate (loose, light weeds may poke through)	✔ Good	✔ Good	Low	⚠ May blow/wash on slopes	⚠ Low	✔ Moderate	naturalized beds
Pine bark (shredded)	✔ Good	✔ Good	✔ Good	Low	⚠ Some wash	⚠ Low–Moderate	✔ Good	Beds, general landscape use
Pine bark nuggets (large chunks)	⚠ Moderate (light can penetrate gaps)	⚠ Moderate	⚠ Moderate	Low	❌ High (float away easily)	⚠ Low	✔ Good	Decorative mulch, dry areas, flat ground
Pine bark fines	✔ Excellent (dense)	✔ Excellent	✔ Excellent	❌ High (may crust/mat)	⚠ Some	⚠ Moderate	✔ High	Containers, soil amendment, vegetable beds
Whole leaves	⚠ Moderate (can shift, weeds poke through)	✔ Good	✔ Good	❌ High	❌ High	⚠ Moderate	✔ Moderate	Temporary mulch, woodland-style beds
Leaf mold	✔ Good	✔ Excellent (acts like sponge)	✔ Excellent	Low	Low	✔ Excellent	✔ Excellent	Soil amendment, topdressing, seed beds
Compost	⚠ Moderate (thin layer, weeds germinate easily)	✔ Good	✔ Good	Low	⚠ May wash on slopes	✔ Excellent (nutrient-rich)	✔ Good	Soil amendment, veggie gardens, topdressing
Horse manure (aged)	❌ Poor–Moderate (often contains weed seeds)	✔ Good	✔ Good	Low	⚠ May erode if loose	✔ Moderate	⚠ Moderate	Soil enrichment, not top mulch
Cow manure (aged)	❌ Poor (can be heavy/clumpy, weeds possible)	✔ Excellent (dense, moisture-holding)	✔ Excellent	⚠ Medium (can cake)	⚠ Some	✔ Moderate–High (nutrients + humus)	✔ Good	Soil enrichment, mixing into beds (not surface mulch)

Material	Weed Suppression	Moisture Retention	Runoff Control	Matting Risk	Washes Away in Heavy Rain	Soil Enrichment	Insulation (Temp Buffer)	Best Use in Landscape
Chicken manure (aged/composted)	❌ Poor as mulch	⚠️ Moderate	⚠️ Moderate	Low	❌ Washes easily	✅ Very high nutrients	⚠️ Low	Fertilizer, not mulch
Straw	✅ Good (if thick enough, but can blow)	✅ Good	✅ Good	⚠️ Medium (slugs, soggy mats)	✅ High in wind/rain	✅ Moderate (adds OM quickly)	✅ Moderate	Vegetable beds, short-season crops
Hay	⚠️ Poor–Moderate (often full of weed seeds)	✅ Good	✅ Good	⚠️ Medium	✅ High	✅ Moderate	✅ Moderate	Cover crop mulch, soil improvement
Plastic sheeting (black PE film)	✅ Excellent	✅ Excellent (stops evap)	✅ Excellent	None	❌ Tears/needs anchoring	❌ None	✅ Very high (warms soil)	Commercial vegetable production
Landscape fabric	✅ Good short-term, degrades over time	⚠️ Moderate (water passes, but not ideal)	⚠️ Moderate	None	Low if anchored	❌ None (can suffocate soil life)	⚠️ Moderate	Under rock/gravel, not for plant beds long-term
Decorative stone / gravel	✅ Good (blocks weeds if used with fabric)	❌ Poor (reflects heat, dries soil)	⚠️ Poor	None	Low	❌ None	❌ Can overheat soil	Paths, xeriscapes, permanent beds (with geotextile)
Living mulch (cover crops/groundcovers)	✅ Moderate-High	✅ High	✅ High	Low	⚠️ Can move if shallow	✅ High (fixes N if legumes)	✅ Moderate	Soil stabilization, orchard floors, vegetable interplanting