Soil Quality Checklist

## 🧱 1. Physical Properties

[ ] Soil has a loose, crumbly texture—not compacted or sticky.

[ ] No hardpan layers or crusts that block root penetration.

[ ] Soil drains well within 24–48 hours after rain.

[ ] Loamy texture with a balanced mix of sand, silt, and clay.

[ ] Roots grow straight down without curling or being stunted.

[ ] No water pooling or signs of waterlogging on the surface.

## 🌱 2. Biological Properties

[ ] Earthworms are visible when digging (at least 5 per square foot).

[ ] Decomposers like fungi or microbes are active in organic matter.

[ ] No foul smells indicating anaerobic (airless) decay.

[ ] Presence of mulch, compost, or animal manure on or in the soil.

[ ] Living plant roots and residue are helping to feed soil organisms.

[ ] No excessive pest larvae or visible harmful insects in the soil.

## 🧪 3. Chemical Properties

[ ] Soil pH is between 6.0 and 7.5 (neutral to slightly acidic).

[ ] Soil tested for nitrogen (N), phosphorus (P), and potassium (K).

[ ] Correct fertilizer applied based on soil test results.

[ ] Calcium, magnesium, sulfur, and other micronutrients tested.

[ ] Salinity checked if in arid or salt-prone areas.

[ ] Lime or sulfur applied to adjust pH if needed.

## 🧼 4. Cleanliness and History

[ ] No visible plastics, glass, or construction waste in the soil.

[ ] No industrial dumping or oil/chemical contamination on site.

[ ] Weeds are under control—not overtaking field or garden area.

[ ] Previous pesticide or herbicide use has been documented and evaluated.

[ ] No signs of persistent toxins or heavy metals.

[ ] Land has been left fallow or cover-cropped recently.

## 📋 5. Field Notes & Observations

[ ] General color and smell of the soil:

[ ] Recent crop history or field use:

[ ] Pest or disease issues observed:

[ ] Any amendments recently added:

[ ] Recommendations for improvement: