

Soil Microaggregates: consisting of silt, clay, humus, iron & aluminum oxides, lime (i.e., depending on soil pH), precipitated minerals (e.g. calcium phosphate).

Soil Microaggregates: < 0.25 mm dia.

Root Hairs: 0.01- 0.05 mm dia.

Mycorrhizal fungi: (0.002 – 0.007 mm dia.) Hyphae can grow 5 – 15 cm from the root. Glomalin coats & aggregates the soil particles.

Soil Macroaggregates: formed by a healthy soil
(Large Aggregates: > 2 – 5 mm dia.)

- Coarse Sand: 1.0 - 0.5 mm
- Med. Sand: 0.5 - 0.25 mm
- Fine Sand: 0.25 - 0.10 mm
- Silt: 0.05 - 0.002 mm
- Clay: < 0.002 mm

The Blue background is water held in the aggregate.

Fine sand

Particulate Organic Matter

Micropores (< 0.06 mm dia.)

Rhizosphere

Bacterial Colonies (Bacteria: 0.0005 - 0.005 mm dia.)

(Ref. NRCS Soil Quality Indicators)

RH = Relative Humidity

Soil Pore (RH ≈ 100%)

Sand

Rhizosphere

Med. Sand

Fine feeder root: (≈ 0.3 mm dia.)

Water held between the aggregates.

