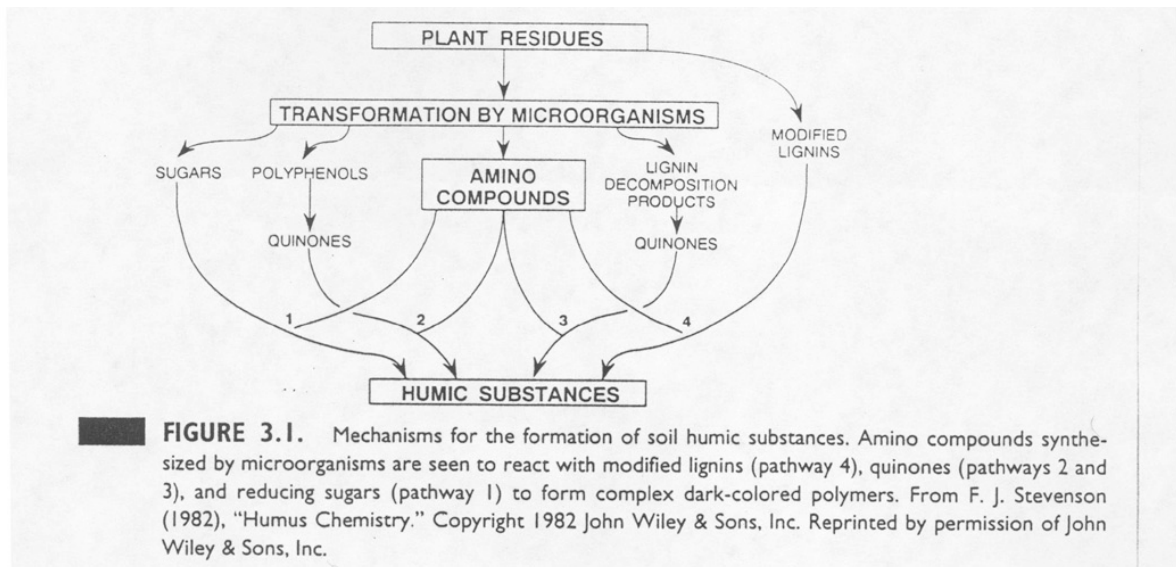


**E) Soil organic matter** (fig 5.6 from T&T showing humic acid structure)

- 1.
- 2.
- 3.
- 4.
- 5.

**SOM formation** (Sparks fig 3.1)



Terms (operationally defined)

Soil organic matter (humus) –

Humic substances –

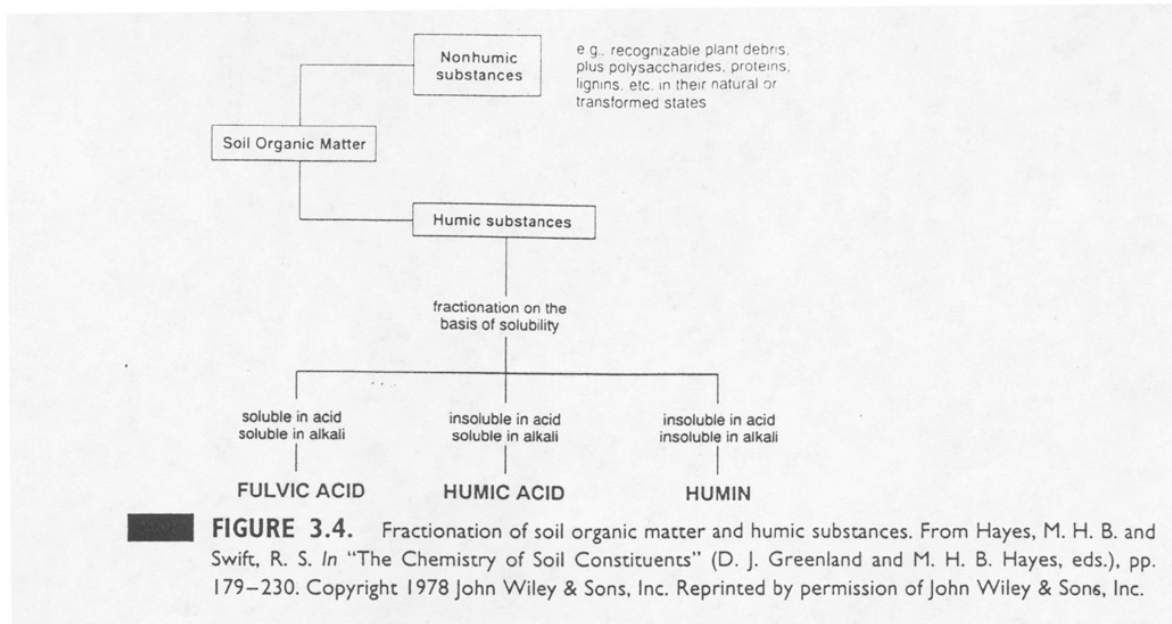
Nonhumic substances –

Humin –

Humic acids –

Fulvic acid –

SOM fractionation (Sparks fig. 3.4)



Problem 12-3. On avg, fulvic acids are 50.7% C, 45.1% O and 4.27% H by mass. What is the simplest empirical formula?

How about humics with an avg of 55% C, 35% O and 4.5% H?