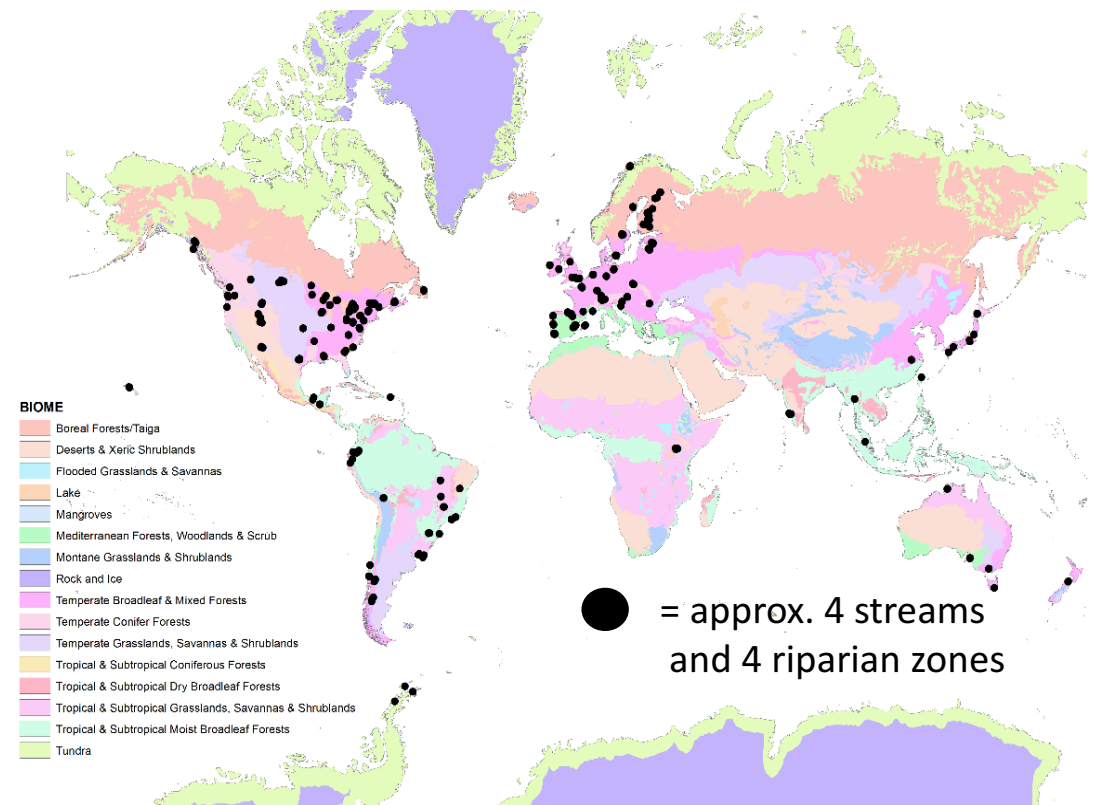


CELLDEX – CELLulose Decomposition EXperiment

Are there global patterns to organic-matter decomposition in streams and riparian zones?

- 132 crowd-sourced project partners
- Each given a standardized decomp. kit, protocol
- 4 reference streams, riparian sites per partner
- 530 coupled stream-riparian reference sites
- 40 different countries, all continents
- 0 - 4,750 m in elevation, and 140 ° of latitude

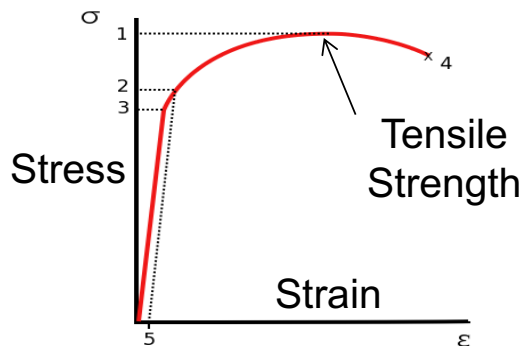


Cotton Strip Assay with Artist's Fabric



Advantages

- Sensitive to environmental conditions
- Decays quickly
- Inexpensive
- Portable/shippable
- Nutrient-free and sterile
- Highly standardized -- 99% cellulose
- Good for long-term and/or large-scale studies



Drawbacks

- Rules out inverts
- Lacks realism, leaves more complex than cotton
- Tensiometer needed



Microbial
community

Fungal biomass
(estimated from glucosamine)

Tensile-
strength loss

C/N/P – nutrient
immobilization
and stoichiometry