

# degradation in poultry manure: how to express concentrations ?

Leo Van Leemput  
Janssen Animal Health  
a division of Janssen Pharmaceutica

# the experiment (1988)

- radiolabelled test substance given to chickens
- collect excreta
- incubate in flow-through transformation system
  - unmixed
  - mixed (50/50) with
    - peat
    - straw
    - wood chips
    - soil
- follow material balance as a function of time
  - volatile radioactivity
  - extractable radioactivity
  - unextractable radioactivity

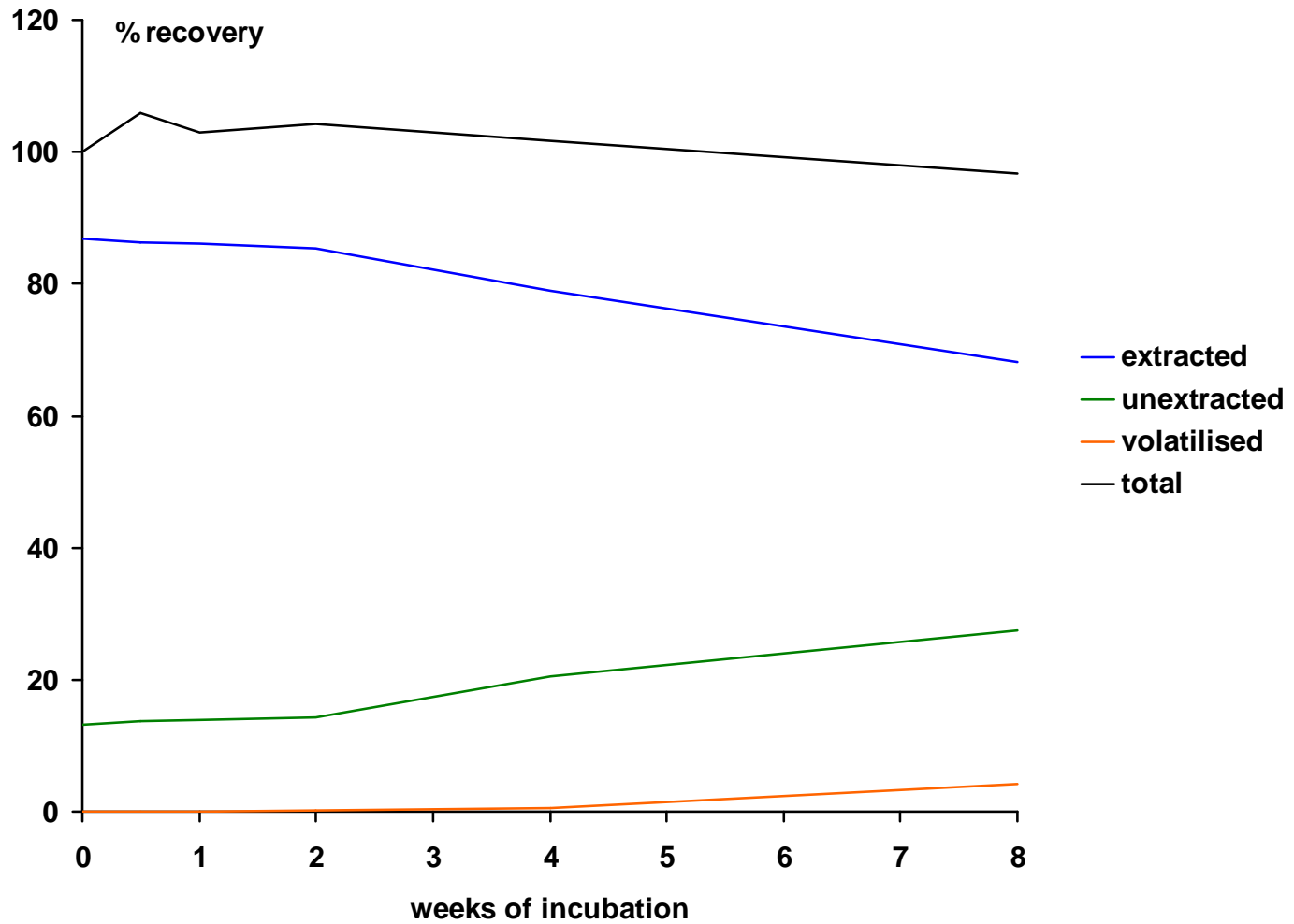
# observation

- high biochemical activity, violent transformation
- radioactivity concentrations expressed as:
  - wet weight of incubate
  - dry weight (24 h at 120 °C) of incubate

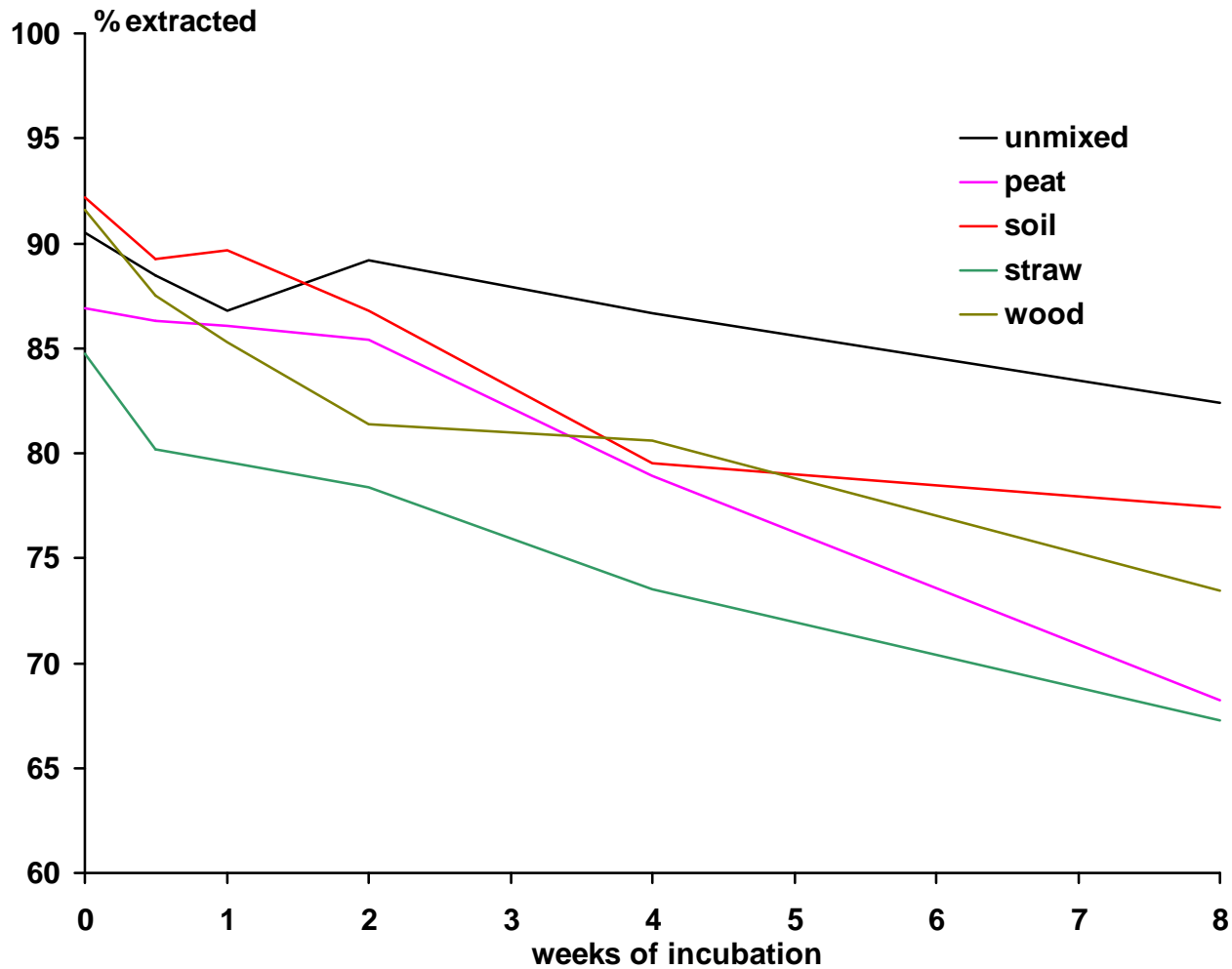
seemed to *increase* with time !

- disappearance of water  
transformation of natural constituents
- refer to *ash content* (3 h at 550 °C)

# some results (1)



## some results (2)



# conclusions

- poultry manure behaves different from cattle or pig slurry
- not liquid, low moisture content
- concentration on an ash content basis