

Notes: genetics (talk to green party 2/ 99)

1. Unnecessary:

existing superabundance e.g. 2000 + varieties of apples at brogdale /
infinite number of citrus crosses / fruit & veg.
loss of (access to) heritage / diversity -- wild and cultivated species
micro-& mundane as well as high profile
problem with production system > existing genetic stock

2. Small-scale grower's perspective: opposite of commercial

succession>synchronous maturity / cropping
open pollinated / viable seeded > sterile (terminator)
adaptable to specific site / situation > only success optimum conditions
localisation: 3rd generation adaptable (+selection) to specific site /
soil / climate / environment ---pheno- influences genotype
threats --danger of cross-pollination (guy jenkins' corn 7/98)

3. Dangers actual

Interests:

Production / supply mechanisms -- exploitation vs.cultivation

Pattern from inanimate inappropriate for living systems

Market imperialism (e.g. U.s. corn / soya to european)

Over-reliance on minimal range of food crops

Fact / information:

Technique --bullet

Different in kind from previous genetic manipulation:

f¹hybrid -- crossed then inbred / self-pollinated up to 9 generations
colchicum (autumn crocus)--mutagenesis (multiploid >diploid / triploid)
cloning by micropropagation already standard practice

Viral vectors (analogy: cancer by common cold)

Untargeted -- cluster of genes >single / specific (scattergun)

Crop failures -- cotton (bollweevil resistant) / flavrsavr tom (paste/seedless)

ref: '72 u.s. corn 40% failure

Increased vulnerability -- less resistant in adverse conditions

4. Potential opinions:

Unpredictable consequences -- cumulative and combinative (side-)effects
e.g. Antibiotic resistance / immunosuppression

Gap between theory and reality e.g. Disposal of trial crops

Extension / repetition of green revolution paradigm (scale / monopoly /
corporate land ownership

Agricrisis / desperation useful to impose change to g.m.'s on industry

Increased producer dependency on chemical manufacturers

Consumer impotent / treated as experimental subject / victim

5. What can you do?

Economics / politics

investment in late 80's on --too late to stop?

breeding programmes long-term (2-3 years+) / lead-time for commercial-scale seed production

e.c. (ref. Barton) ethics committee '(99) -- retrospective > preventative

Alternatives to dominance of food by corporate agribusiness

consumer boycott / demand explicit labelling / consumer education

other forms of direct action --protests / occupations / crop disruption

reform / replace production / delivery system

increased self-sufficiency / own grown (become producer)

subsidiarity > centralised pattern

seedbanks -- e.g. H.s.I. / local / indigenous variations e.g. Millet in ethiopia

biodiversity / landraces / open-pollinated

Terms:

Genetically modified organism

Transgenic o. (animal-plantetc.)