A close-up photograph of yellow flowers, likely a species of pea or lentil, with green stems and leaves. The flowers are in various stages of bloom, with some showing the characteristic papilionaceous structure. The background is a soft, out-of-focus green.

# Mutant populations in R-0-18

Pauline Stephenson

Lars Ostergaard

**Fast neutron irradiation**

**Chemical mutagenesis - EMS**

# Fast neutron irradiation of R-O-18

50 Gy

60 Gy

Control

70 Gy



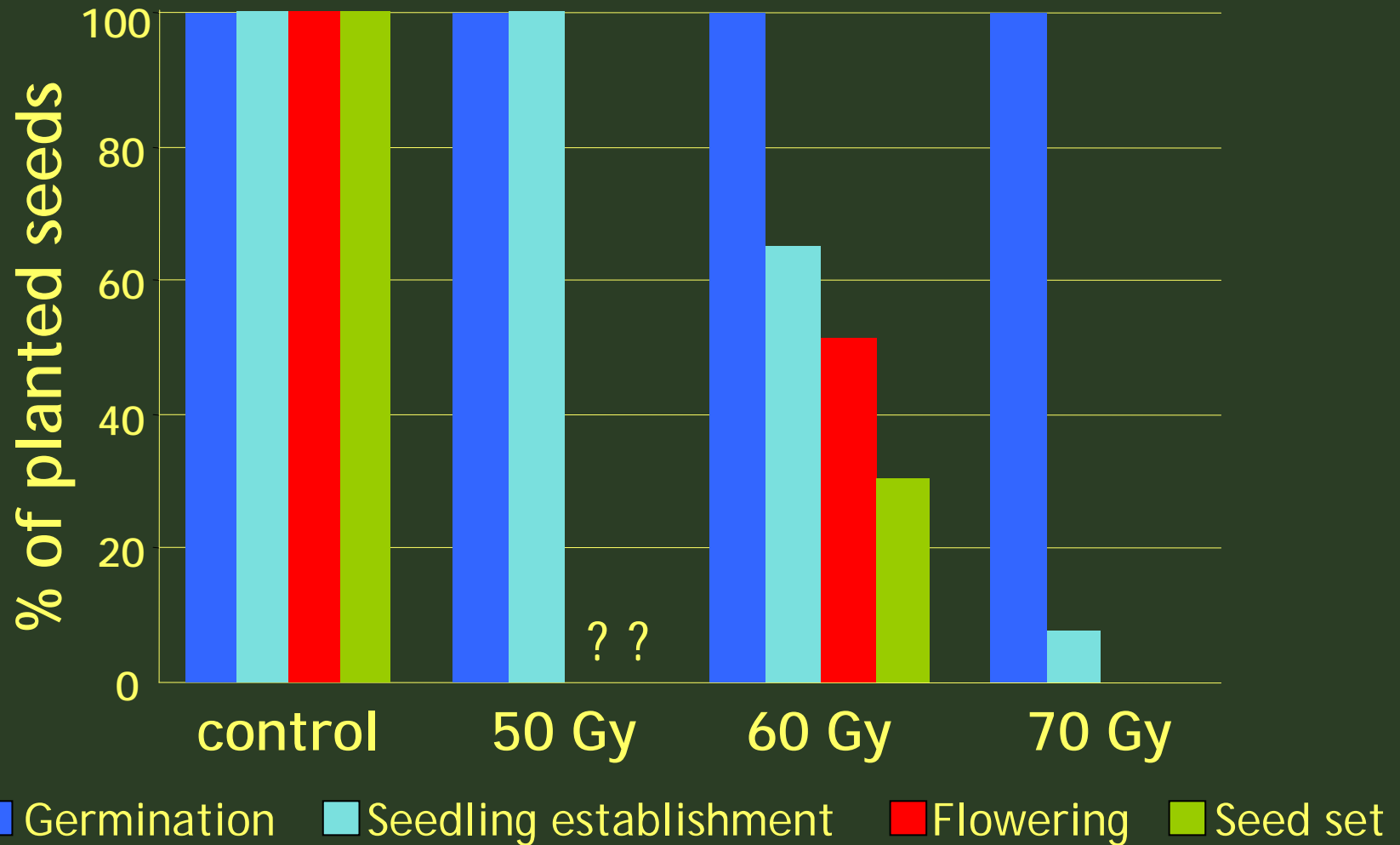
control



70 Gy

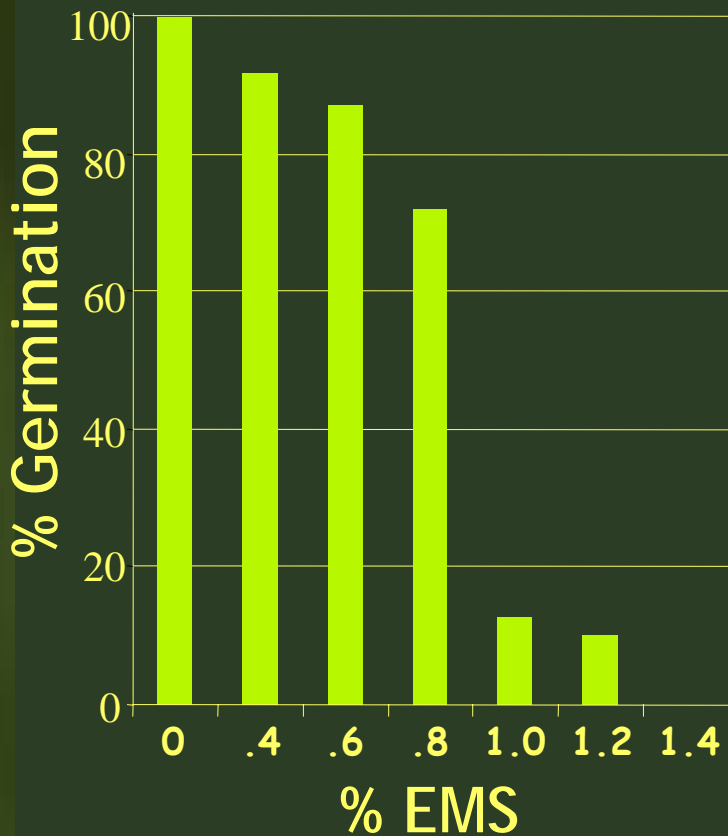


# Stats on fast neutron irradiation of R-O-18

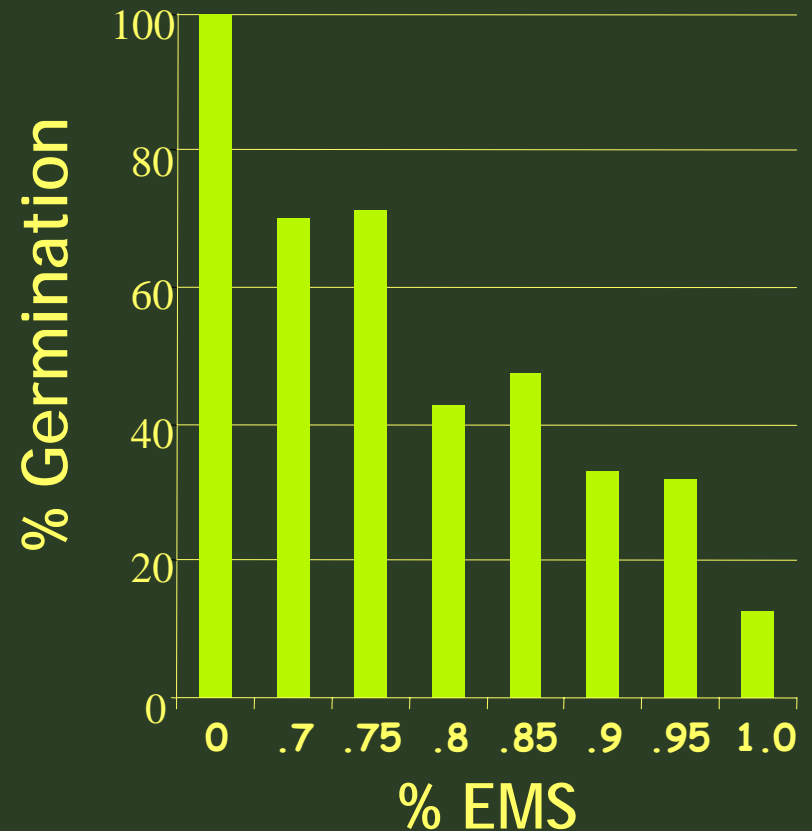


# Stats on EMS treatment of R-O-18

## 0.4-1.4% EMS



## 0.7-1.0% EMS



Untreated

0.70%

0.75%

0.80%

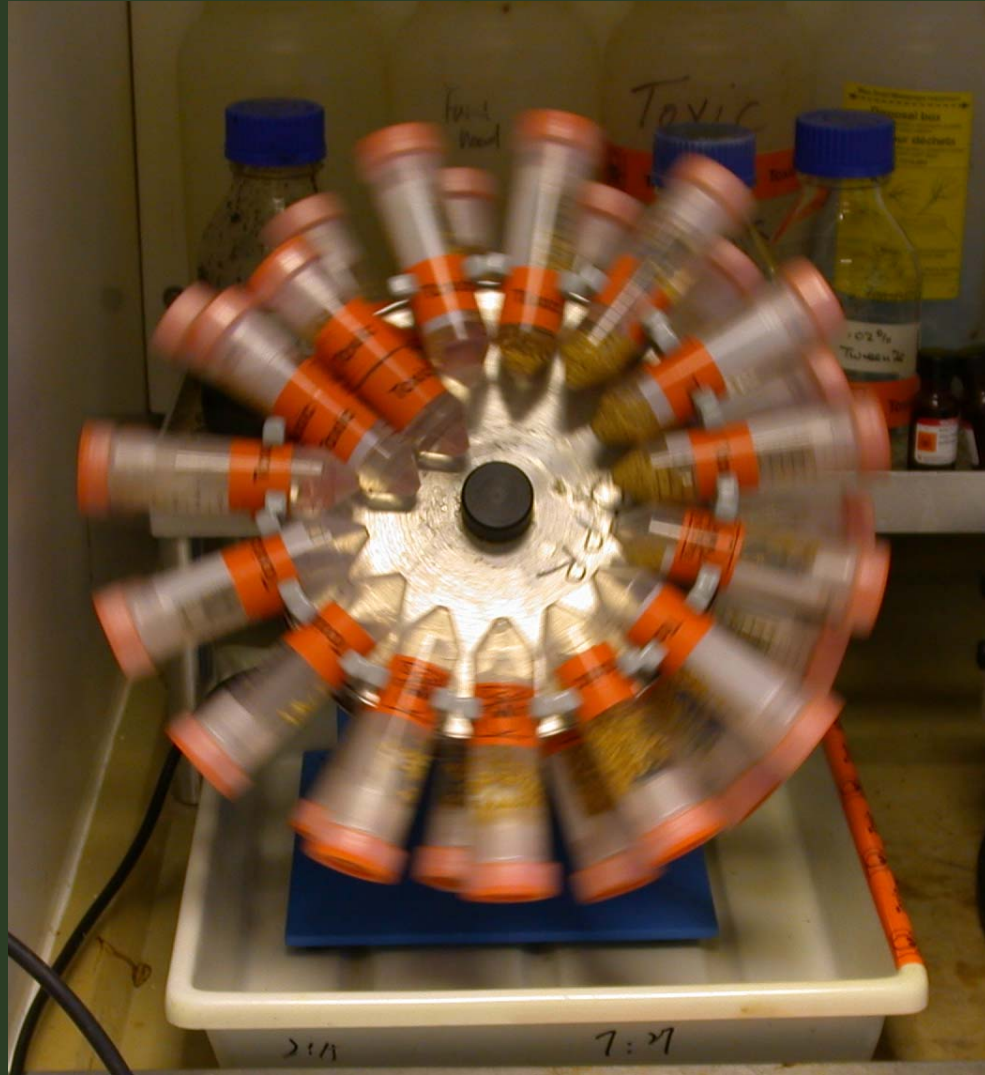


0.85%

0.90%

0.95%

1.0%







14,362 seedlings









**BILLION population**

*(Brassica TILLING Of Norwich)*

# Stats on the BILLION population

37,500 seeds treated with 1% EMS

Germination rate: 38%

14,362 M<sub>1</sub> plants

Thank you