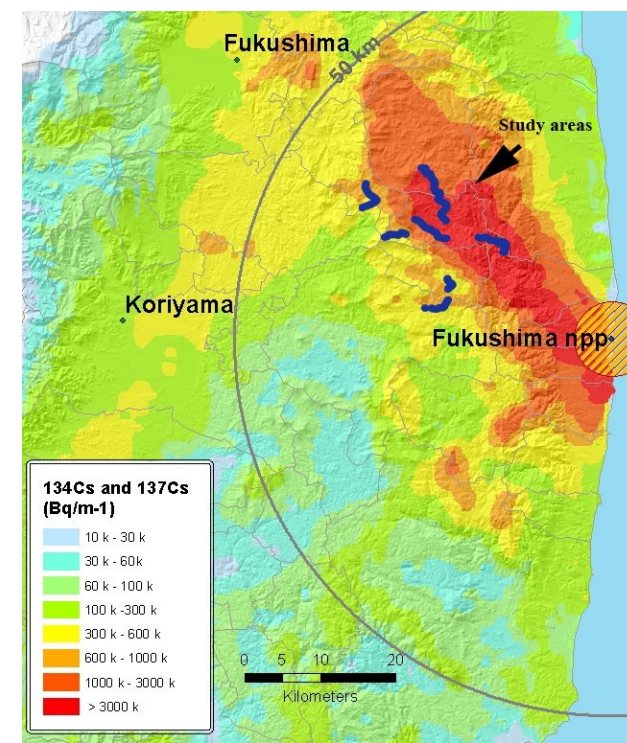


Ecosystem effects of ionizing radiation

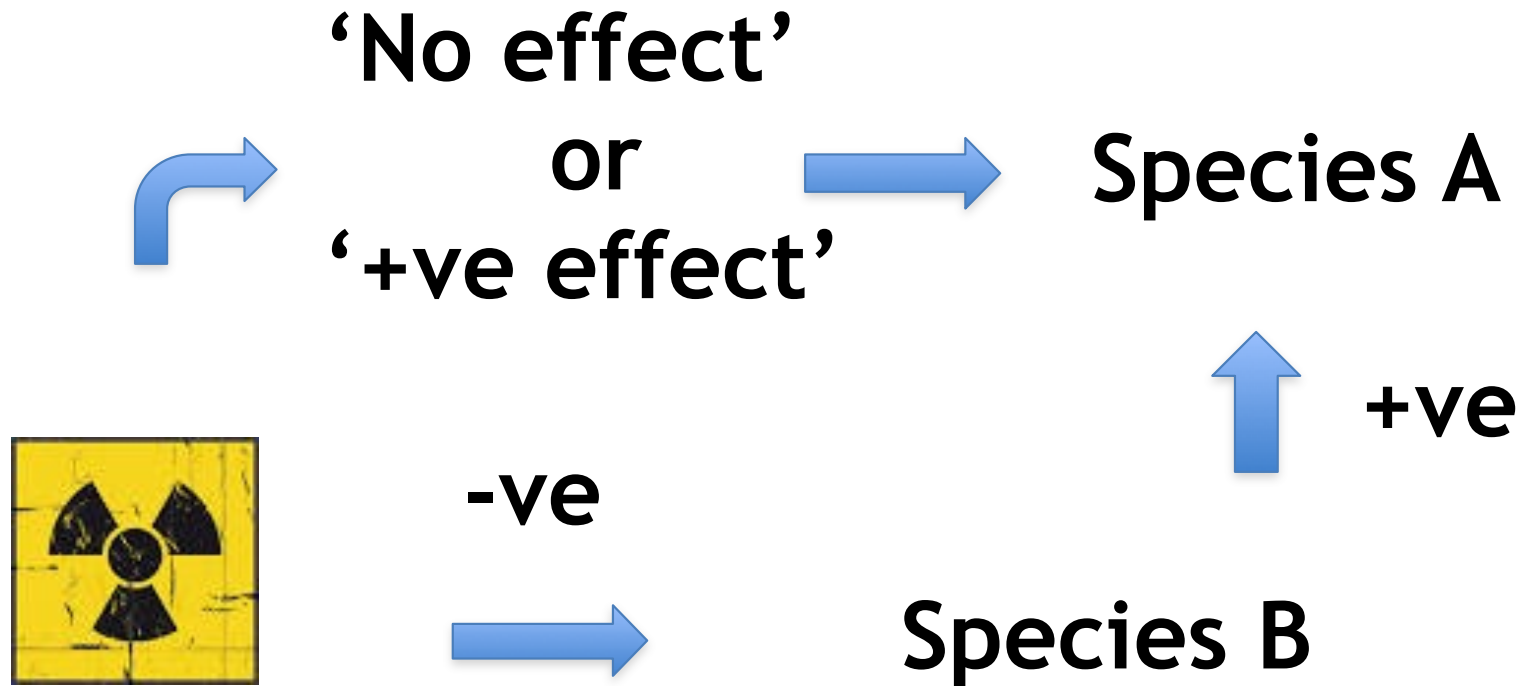


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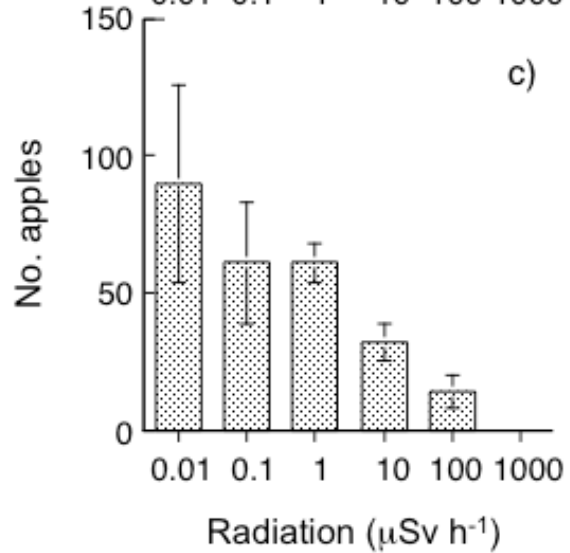
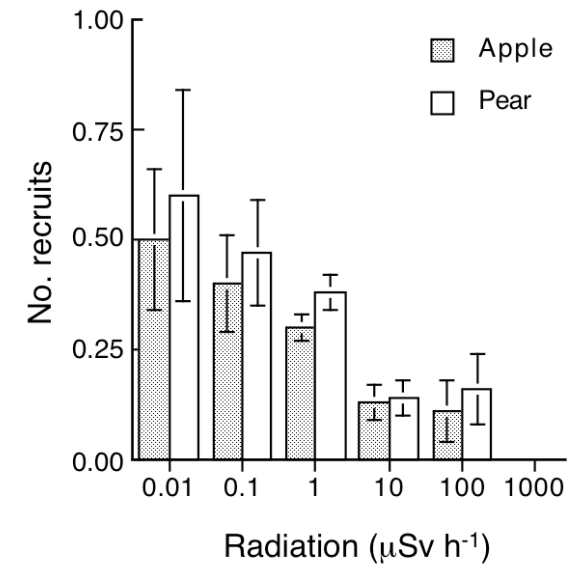
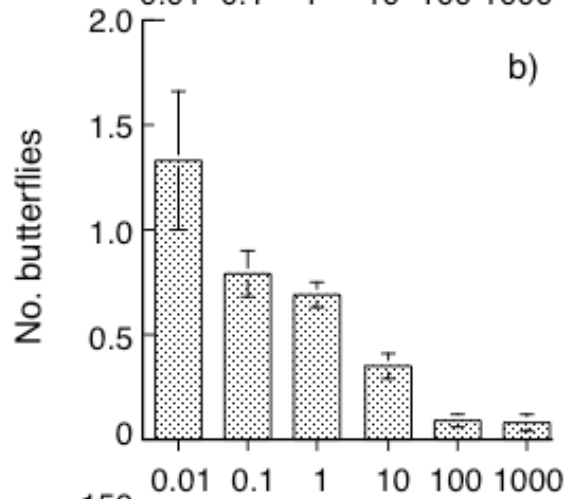
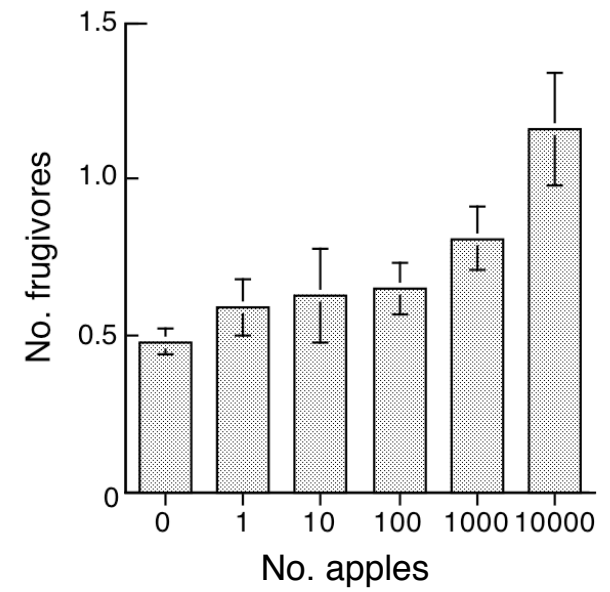
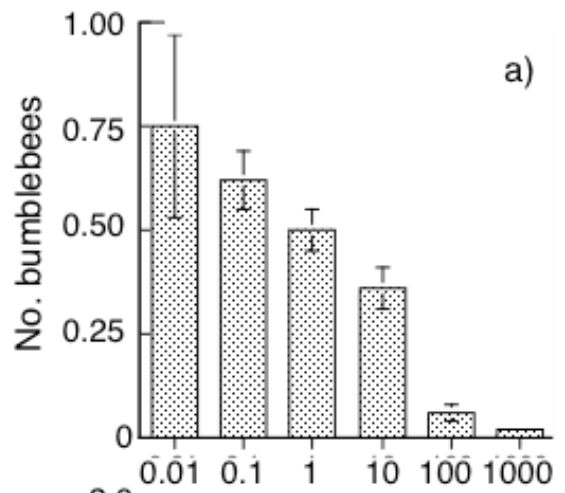


Direct and indirect effects



Ecosystem effects: (1) Apples and pears





No. fruits in relation to radiation and pollinators

$\chi^2 = 397.83$, $df = 10$, $N = 1328$, $P < 0.0001$

Term	df	χ^2	<i>P</i>	Estimate (SE)
Radiation	1	103.64	< 0.0001	-0.402 (0.039)
No. butterflies	1	45.97	< 0.0001	0.779 (0.114)
No. bumblebees	1	4.27	0.039	0.302 (0.146)
Species of tree	5	192.63	< 0.0001	
Radiation * No. butterflies	1	8.24	0.0041	-0.450 (0.157)
Radiation * No. bumblebees	1	2.77	0.010	-0.249 (0.150)

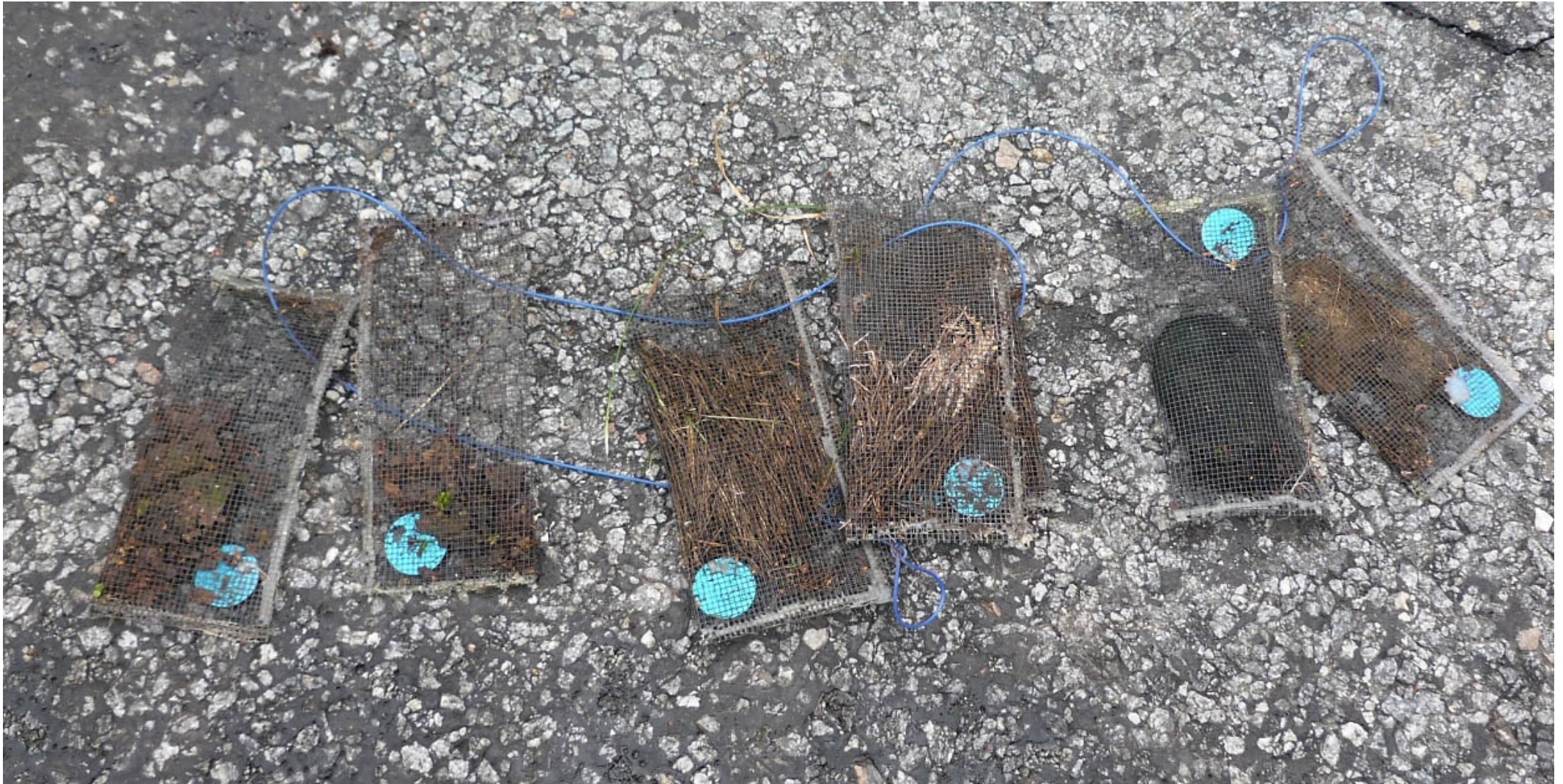
Ecosystem effects: (2) Decomposition



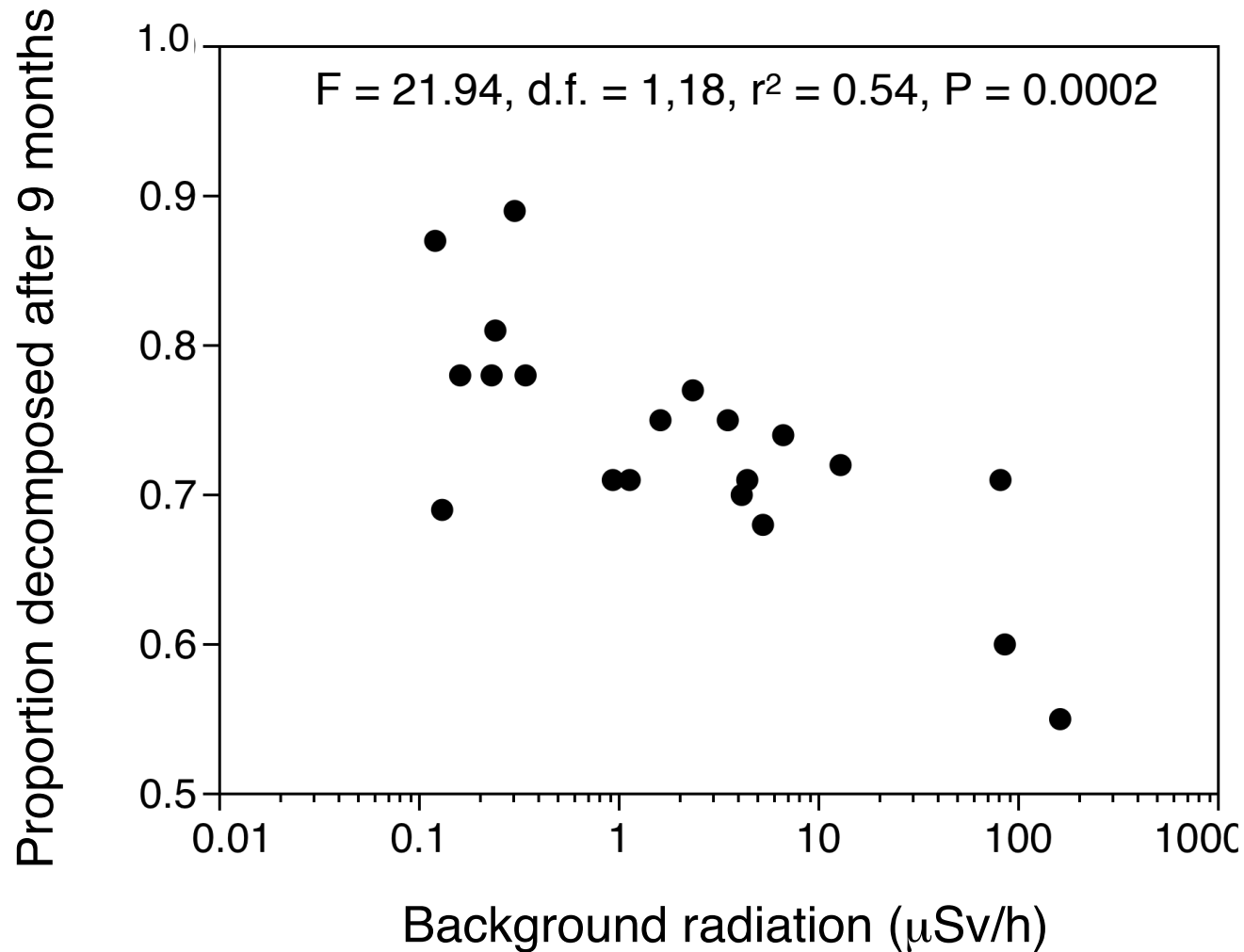
Decomposition (i)



Decomposition (ii)



Decomposition and radiation (iii)



(Mousseau et al., *Oecologia* 115:429-437, 2014)

50% difference!!!

Decomposition and radiation (iv)

