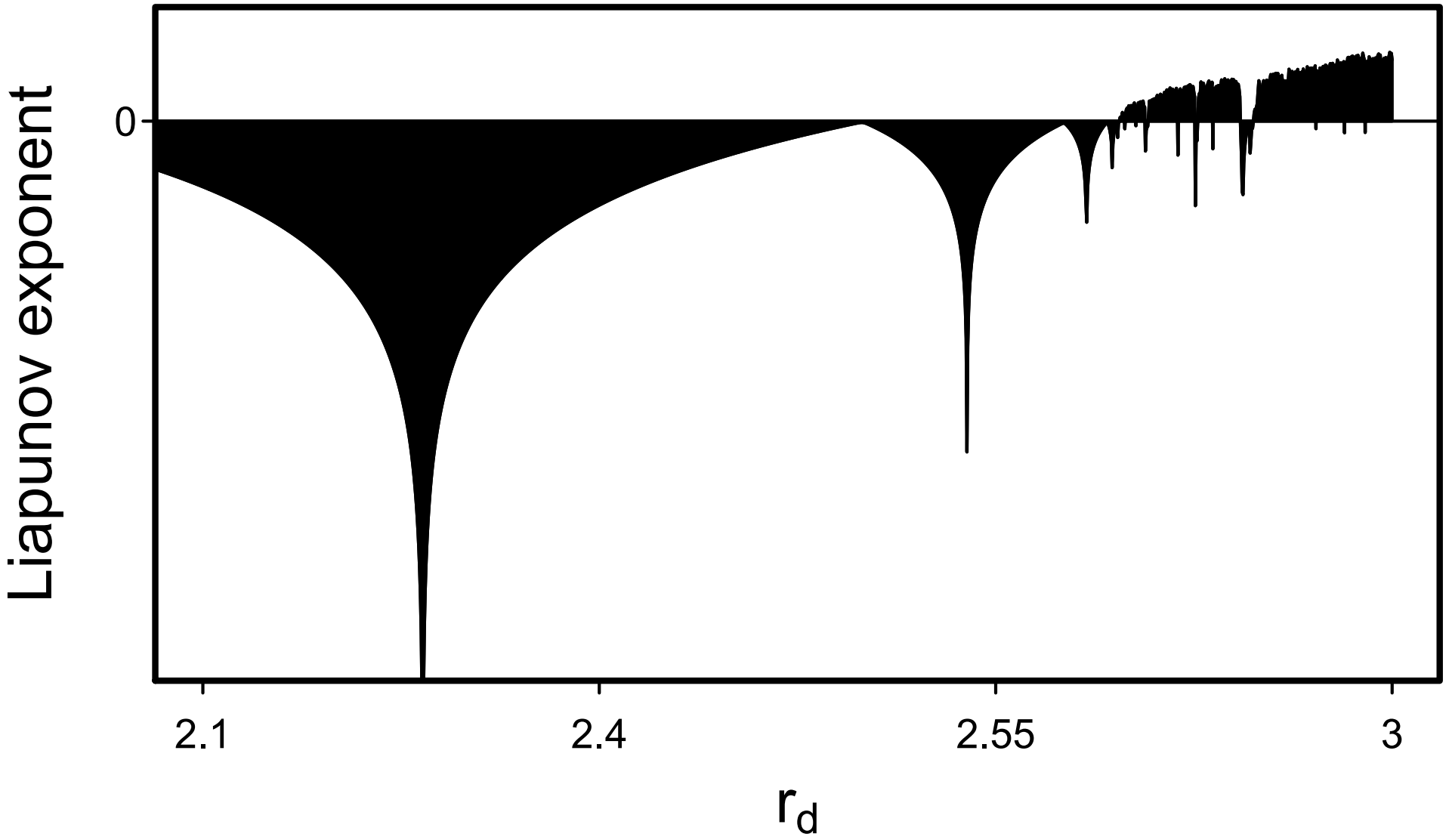
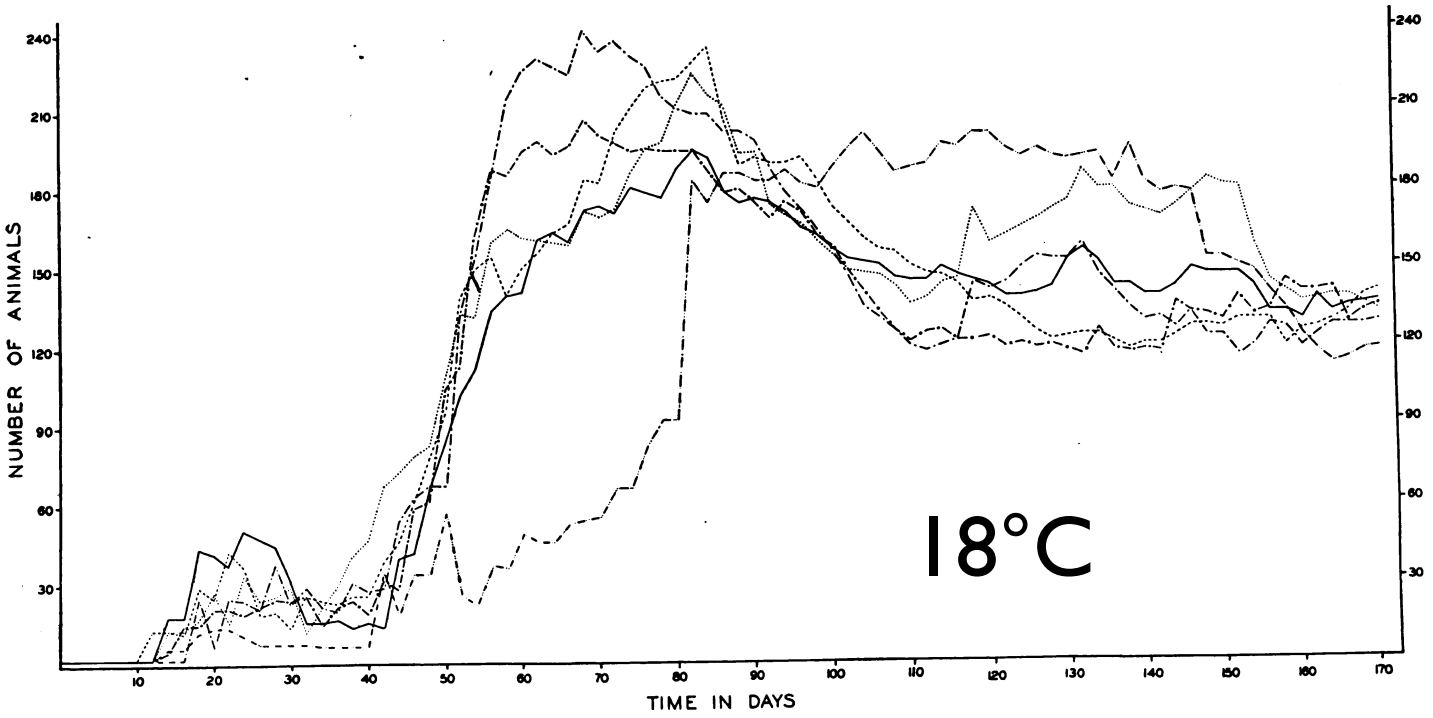
$$\lambda = \frac{ln\left(\frac{|\Delta_t|}{|\Delta_0|}\right)}{t}$$

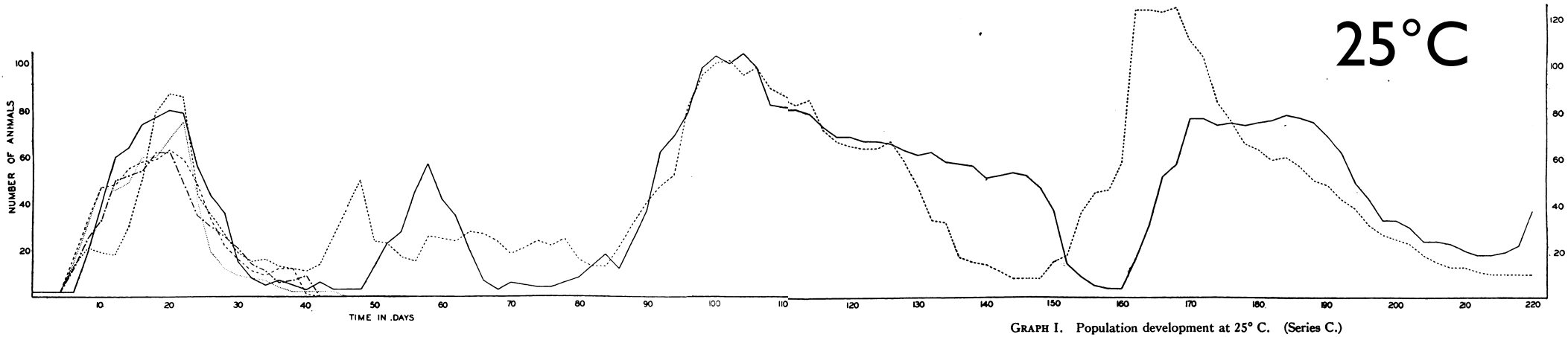


ANALYSIS OF POPULATION DEVELOPMENT IN DAPHNIA AT DIFFERENT TEMPERATURES

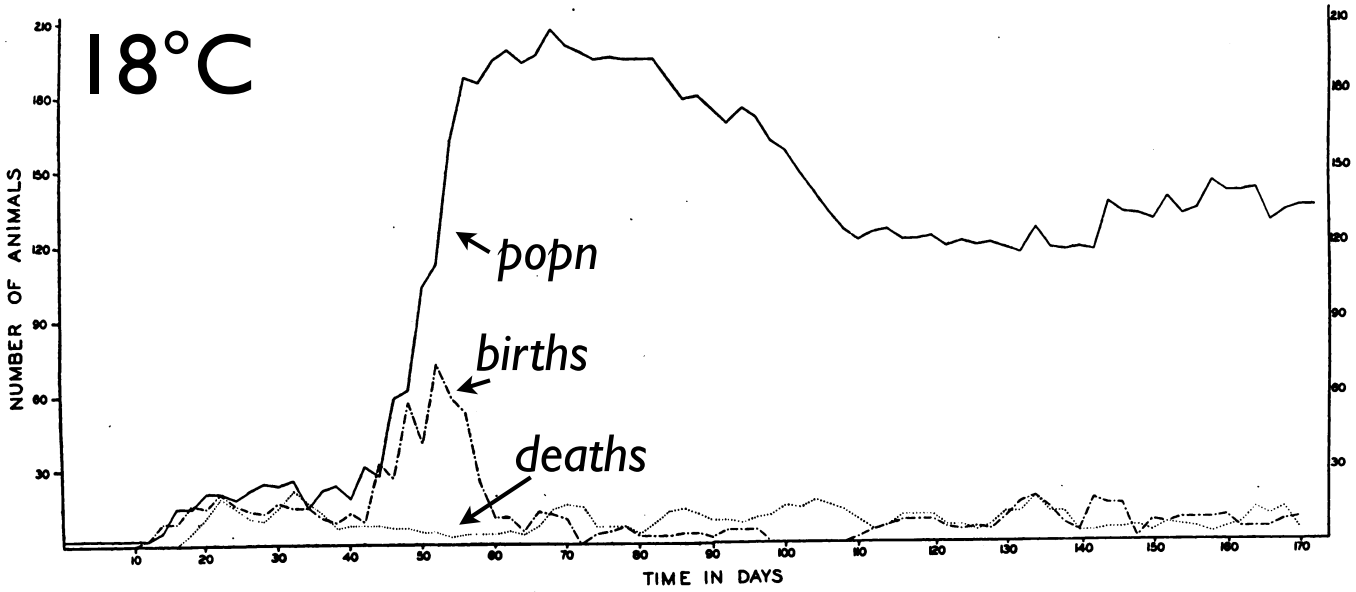
DAVID M. PRATT



GRAPH II. Population development at 18° C. (Series C.)

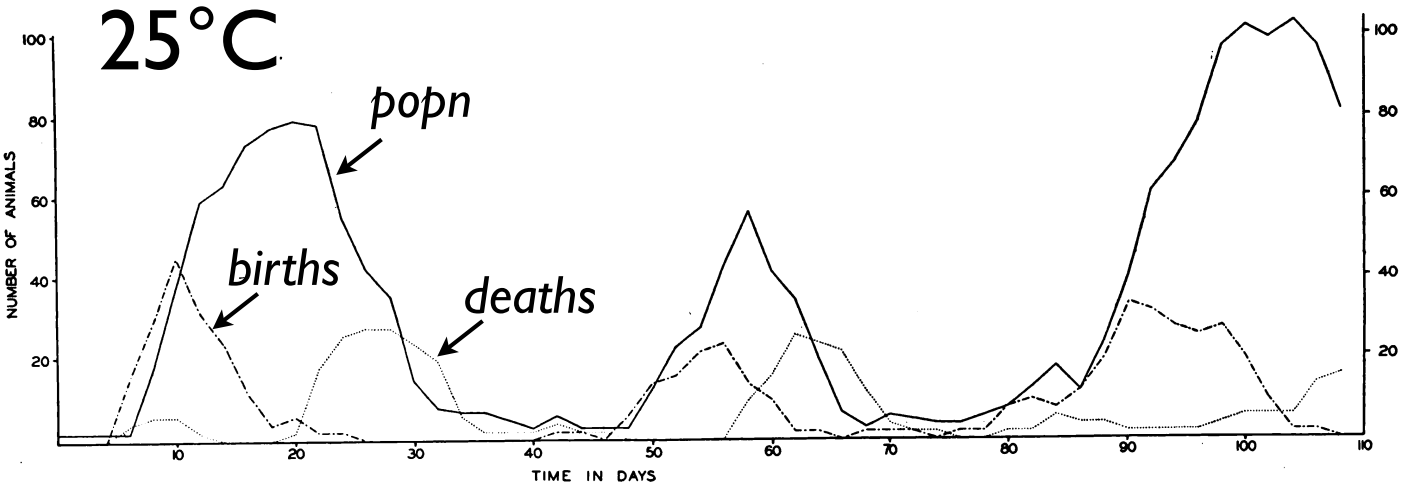


GRAPH I. Population development at 25° C. (Series C.)



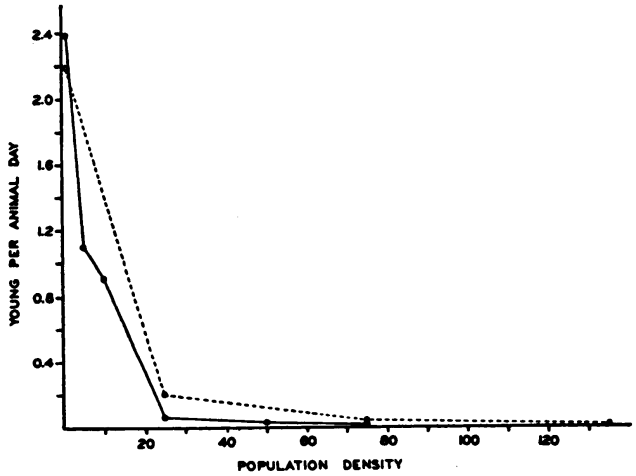
GRAPH IV. Mechanism of oscillation at 18° C.

Legend: population size ——————
deaths * . . . . . .
births * —·—·—·—·—



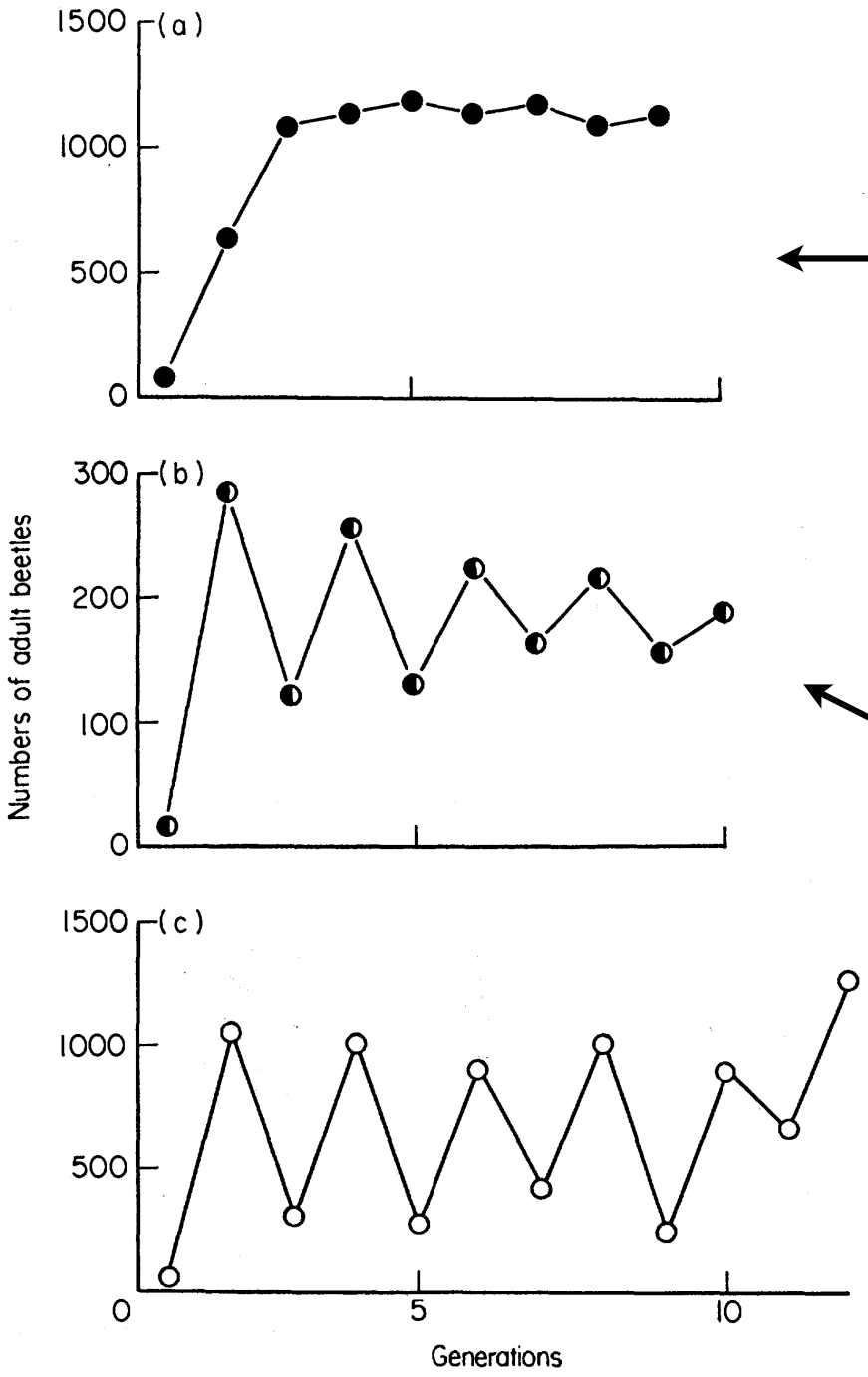
GRAPH III. Mechanism of oscillation at 25° C.

Legend: population size ——————
deaths * . . . . . .
births * —·—·—·—·—



Population density and reproductive rate.

Legend: 18° C. - - - - - - -
25° C. ——————



Callosobruchus chinensis

Callosobruchus maculatus

PATTERNS OF DYNAMICAL BEHAVIOUR IN SINGLE-SPECIES POPULATIONS

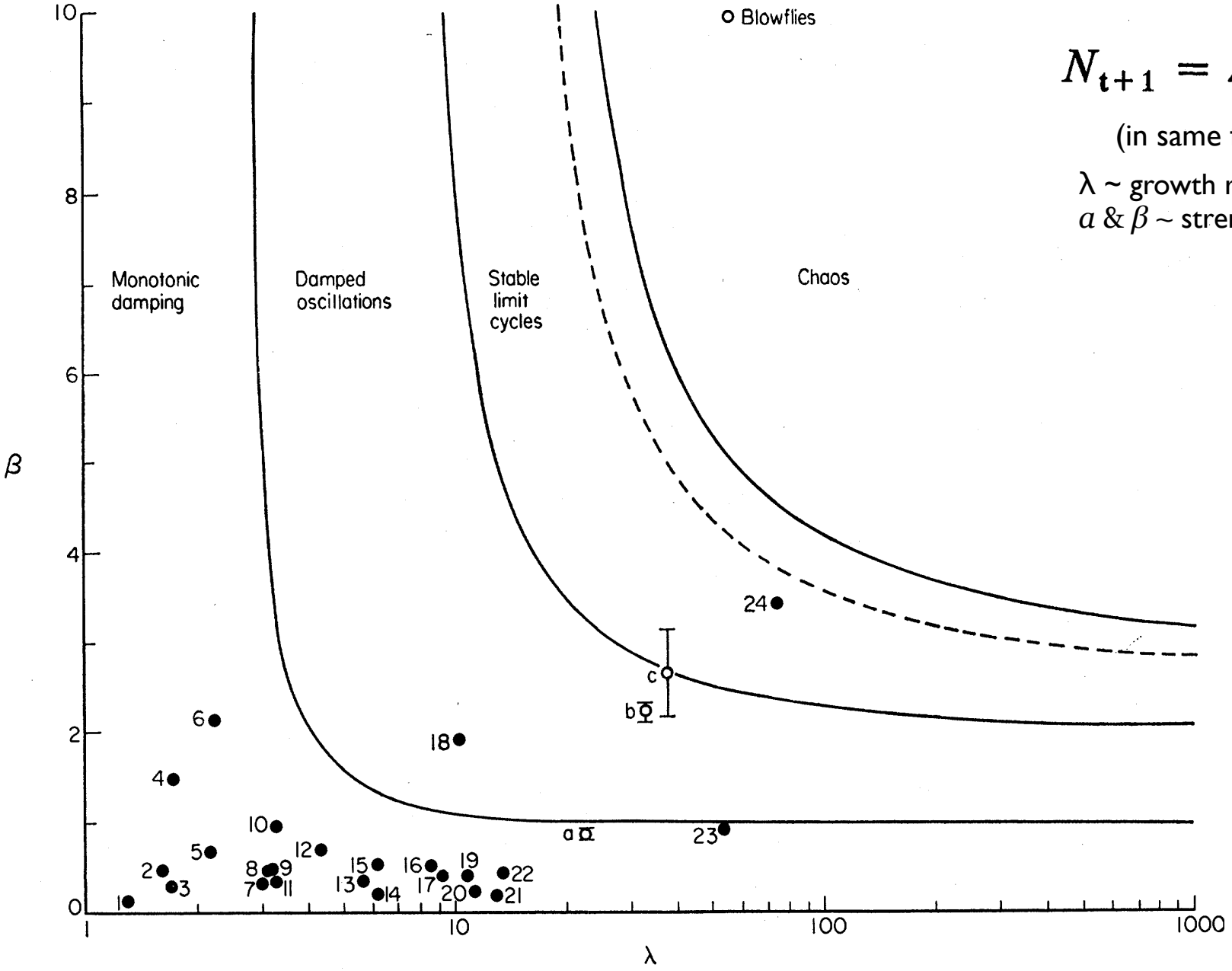
By M. P. HASSELL,* J. H. LAWTON† AND R. M. MAY‡

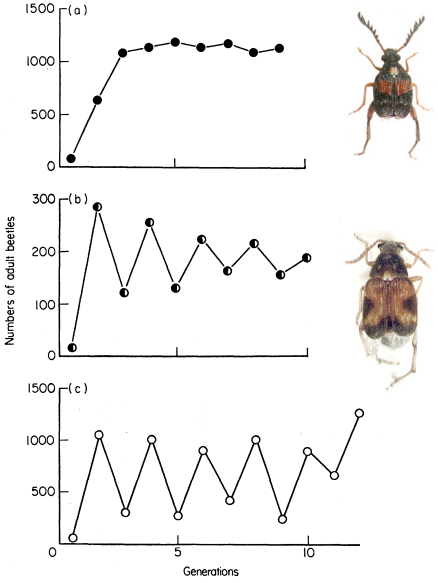
$$N_{t+1} = \lambda N_t (1 + aN_t)^{-\beta}$$

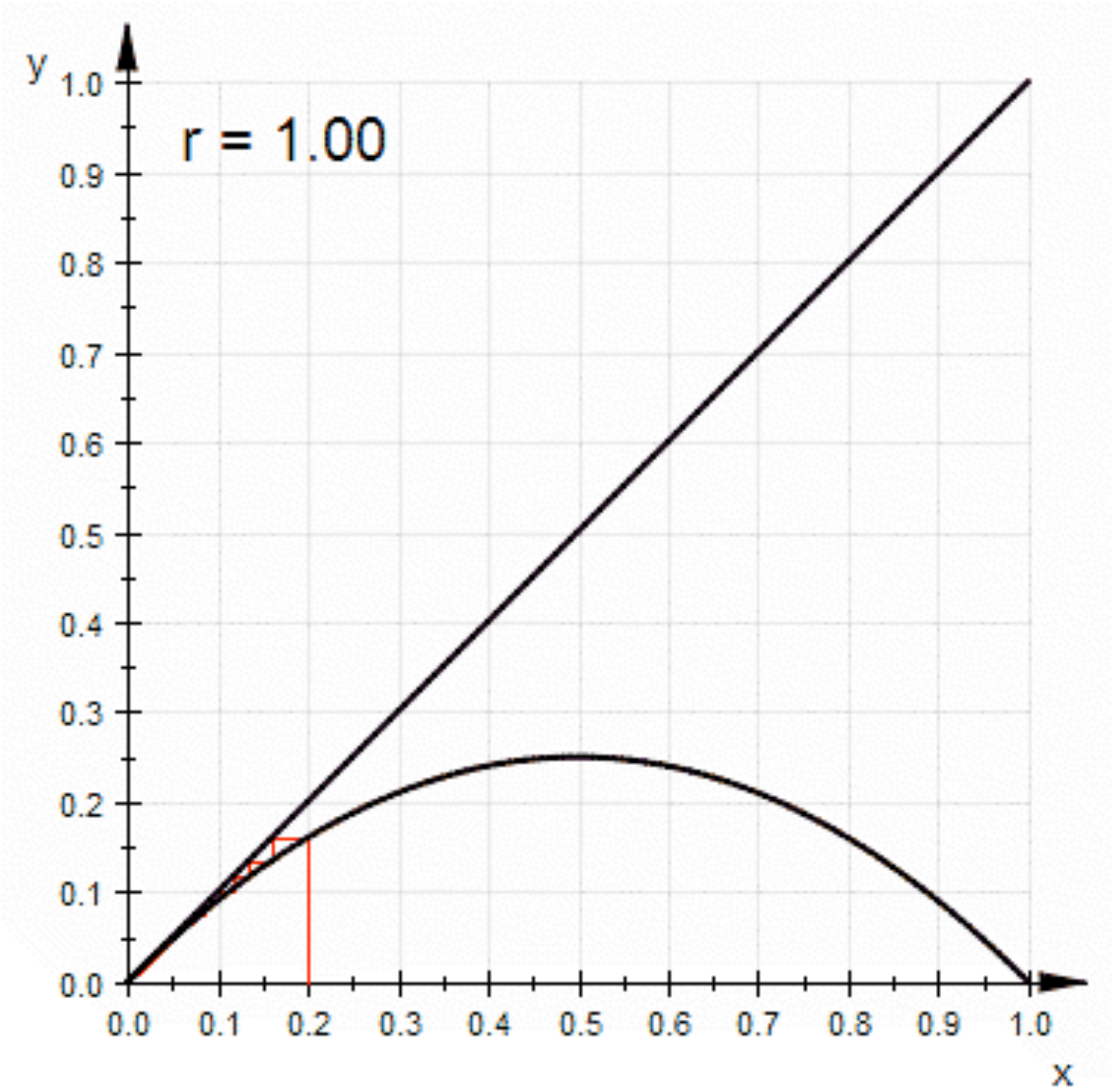
(in same family as logistic)

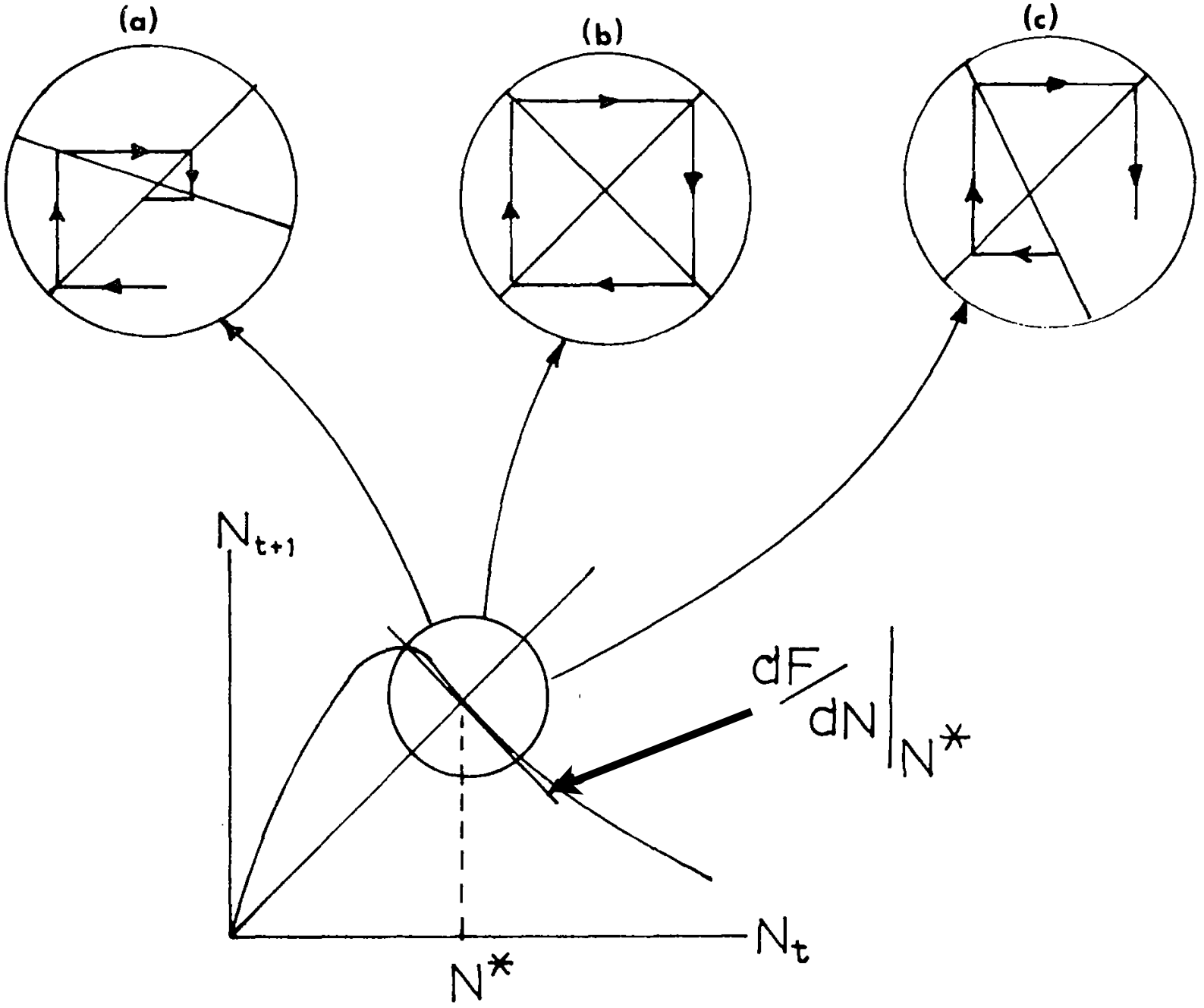
λ ~ growth rate (like r_d)

a & β ~ strength of density dependence






r = 1.00
y
x
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0



Ricker model