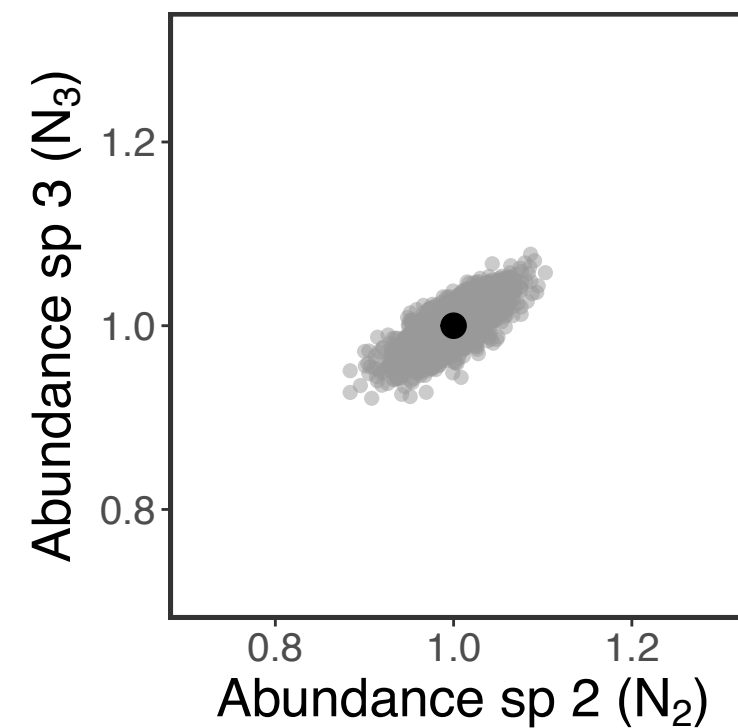
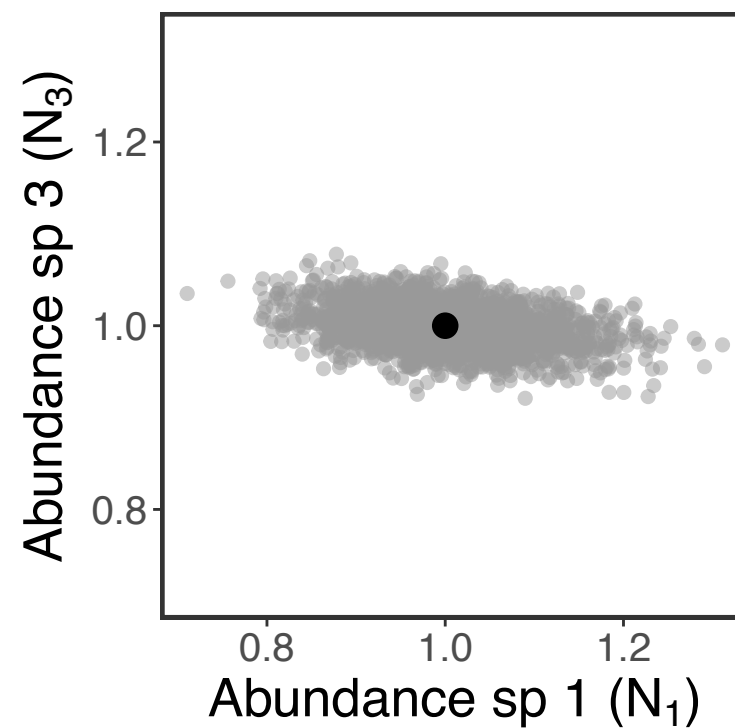
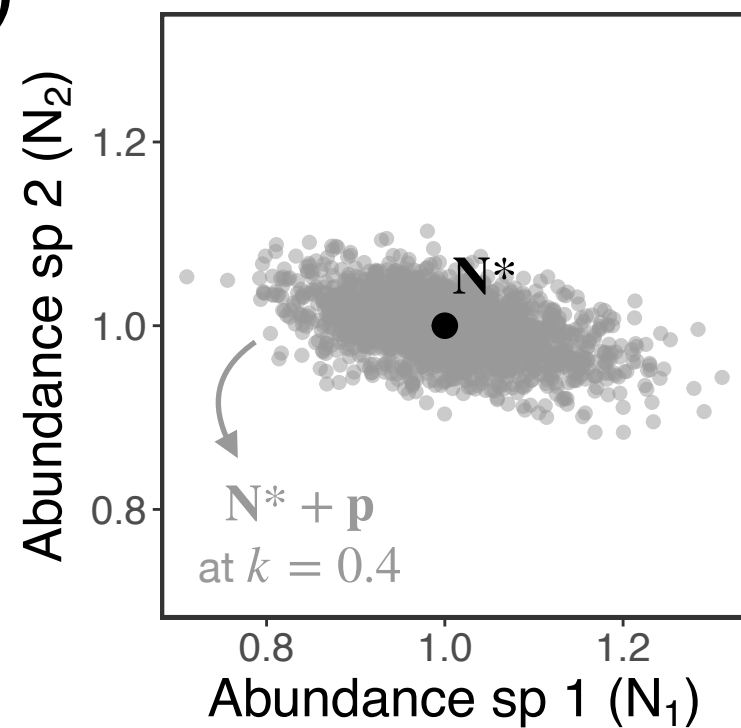


(a)**(b)**

$$\mathbf{J} = \begin{bmatrix} 1 & -2 & 0 \\ 0 & -1 & 0 \\ 0 & 2 & -3 \end{bmatrix} \quad \lambda_1 = 1, \lambda_2 = -1, \lambda_3 = -3 \quad \mathbf{v}_1 = \begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix}$$

	$k = 0.1$	$k = 0.2$	$k = 0.3$	$k = 0.4$	$k = 0.5$
Expected sensitivity ranking:	sp 1 sp 2 sp 3	sp 1 sp 2 sp 3	sp 1 sp 2 sp 3	sp 1 sp 2 sp 3	sp 1 sp 2 sp 3

Eigenvector ranking:

sp 1
sp 2, sp 3 (tied)

(c)