



Subject Areas:

XXXXX, XXXXX, XXXX

Keywords:

XXXX, XXXX, XXXX

Author for correspondence:

Insert corresponding author name

e-mail: xxx@xxxx.xx.xx

Insert the article title here

X. X. First author¹, X. Second author² and
X. Third author³

¹First author address

²Second author address

³Third author address

The abstract text goes here. The abstract text goes here.
The abstract text goes here. The abstract text goes here.
The abstract text goes here. The abstract text goes here.
The abstract text goes here. The abstract text goes here.

1. Insert A head here

This demo file is intended to serve as a “starter file”
for rsproca journal papers produced under L^AT_EX using
rsproca.cls v1.5e.

(a) Insert B head here

Subsection text here.

(i) Insert C head here

Subsubsection text here.

2. Equations

Sample equations.

$$\begin{aligned}\frac{\partial u(t, x)}{\partial t} &= Au(t, x) \left(1 - \frac{u(t, x)}{K}\right) - B \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)}, \\ \frac{\partial w(t, x)}{\partial t} &= \delta \frac{\partial^2 w(t, x)}{\partial x^2} - Cw(t, x) + D \frac{u(t - \tau, x)w(t, x)}{1 + Eu(t - \tau, x)},\end{aligned}\tag{2.1}$$

$$\begin{aligned}\frac{dU}{dt} &= \alpha U(t)(\gamma - U(t)) - \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}, \\ \frac{dW}{dt} &= -W(t) + \beta \frac{U(t - \tau)W(t)}{1 + U(t - \tau)}.\end{aligned}\tag{2.2}$$

$$\begin{aligned}\frac{\partial(F_1, F_2)}{\partial(c, \omega)} \Big|_{(c_0, \omega_0)} &= \begin{vmatrix} \frac{\partial F_1}{\partial c} & \frac{\partial F_1}{\partial \omega} \\ \frac{\partial F_2}{\partial c} & \frac{\partial F_2}{\partial \omega} \end{vmatrix} \Big|_{(c_0, \omega_0)} \\ &= -4c_0q\omega_0 - 4c_0\omega_0p^2 = -4c_0\omega_0(q + p^2) > 0.\end{aligned}\tag{2.3}$$

3. Enunciations

Theorem 3.1. Assume that $\alpha > 0, \gamma > 1, \beta > \frac{\gamma+1}{\gamma-1}$. Then there exists a small $\tau_1 > 0$, such that for $\tau \in [0, \tau_1)$, if c crosses $c(\tau)$ from the direction of to a small amplitude periodic traveling wave solution of (2.1), and the period of $(\tilde{u}^p(s), \tilde{w}^p(s))$ is

$$\check{T}(c) = c \cdot \left[\frac{2\pi}{\omega(\tau)} + O(c - c(\tau)) \right].$$

Condition 3.1. From (0.8) and (2.10), it holds $\frac{d\omega}{d\tau} < 0, \frac{dc}{d\tau} < 0$ for $\tau \in [0, \tau_1)$. This fact yields that the system (2.1) with delay $\tau > 0$ has the periodic traveling waves for smaller wave speed c than that the system (2.1) with $\tau = 0$ does. That is, the delay perturbation stimulates an early occurrence of the traveling waves.

4. Figures & Tables

The output for figure is:

Figure 1. Insert figure caption here

The output for table is:

Table 1. An Example of a Table

date	Dutch policy	date	European policy
1988	Memorandum Prevention	1985	European Directive (85/339)
1991–1997	Packaging Covenant I		
1994	Law Environmental Management	1994	European Directive (94/62)
1997	Agreement Packaging and Packaging Waste		
1998–2002	Packaging Covenant II		
2003–2005	Packaging Covenant III		
2006–2007	Decree on Packaging and paper		

5. Conclusion

The conclusion text goes here.

Acknowledgment

Insert the Acknowledgment text here.

References

1. Allwood JM, Cullen JM. 2011 *Sustainable materials: with both eyes open*. Cambridge, UK: UIT Cambridge. See <http://www.withbotheyesopen.com>.
2. MacKay DJC. 2008 *Sustainable energy: without the hot air*. Cambridge, UK: UIT Cambridge. See <http://www.withouthotair.com>.
3. Gallman PG. 2011 *Green alternatives and national energy strategy: the facts behind the headlines*. Baltimore, MD: Johns Hopkins University Press.
4. MacKay DJC. 2013. Solar energy in the context of energy use, energy transportation, and energy storage. *Proc. R. Soc. A* **371**.