

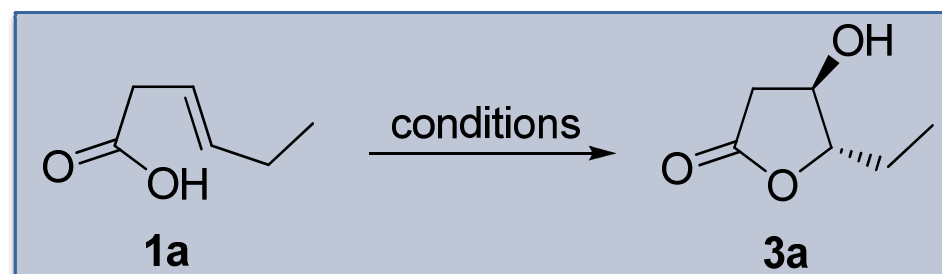
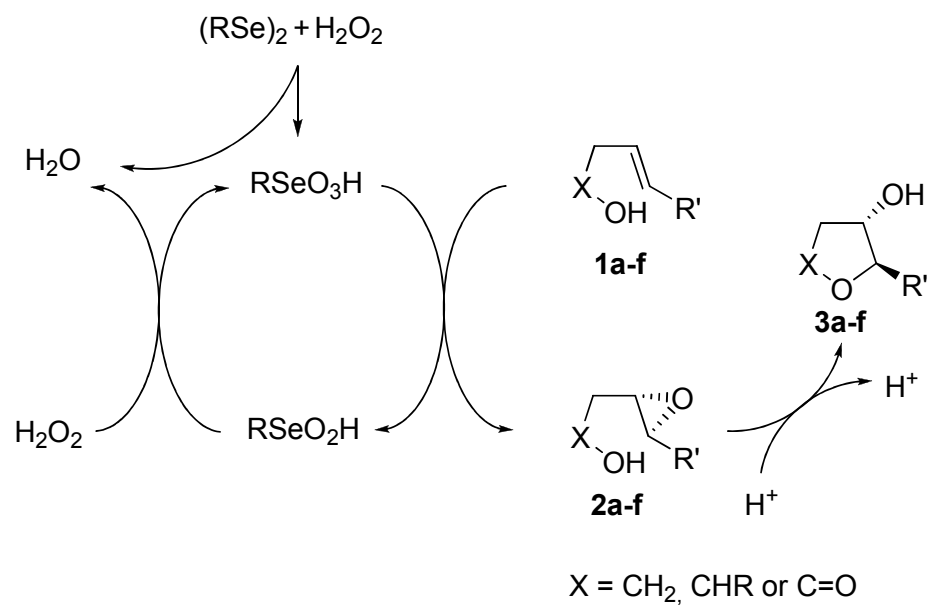
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A. Antoszewska, J. Scianowski,  
C. Santi\*

# ECO-FRIENDLY SELENIUM CATALYZED OXIDATIVE CYCLIZATION

*Group of Catalysis and Green Chemistry*

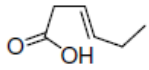
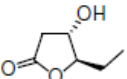
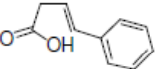
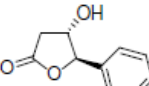
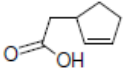
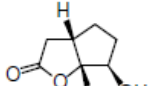
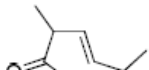
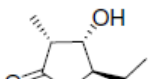

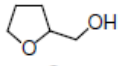
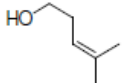

Dipartimento di Chimica e Tecnologia del Farmaco – University of Perugia – Italy

# Oxidative Cyclization



Substrate	Time (h)	(PhSe) <sub>2</sub>	H <sub>2</sub> O <sub>2</sub> eq	Yield %
<b>1a</b>	3	10%	40	19
<b>1a</b>	3	10%	20	40
<b>1a</b>	20	10%	20	65
<b>1a</b>	20	5%	5	70
<b>1a</b>	8	5%	4	100

# Scope

Starting Material	Product	Yields %	r.d.
 <b>1a</b>	 <b>3a</b>	100	
 <b>1b</b>	 <b>3b</b>	85	80:20
 <b>1c</b>	 <b>3c</b>	85	95:5
 <b>1d</b>	 <b>3d</b>	60	60:40
 <b>1e</b>	 <b>3e</b>	85	
 <b>1f</b>	 <b>3f</b>	80	