

## Appendices

### Appendix 1

Acidification rates and annual lime requirements for different farming systems in high (annual rainfall >550 mm) and low (annual rainfall < 300 mm) rainfall environments (Data from Slattery *et al.* 1999).

	Plant species	Acidification rate (kmol(+)/ha.yr)	Lime equivalent (t/ha)
<b>High rainfall</b> (annual rainfall >550 mm)	Perennial pasture	4	0.20
	Annual pasture	5	0.25
	Crop/pasture	7	0.35
	Wheat/lupin	4	0.20
	Tobacco	-0.3	-0.02
	Grapes	2	0.10
	grass/legume (hay)	6	0.30
	Eucalyptus/Acacia	0.7	0.04
	Eucalyptus	1.3	0.07
<b>Low rainfall</b> (annual rainfall <300 mm)	Annual pasture	1	0.05
	Wheat/legume crop	0.3	0.15
	Wheat/pasture	0.4	0.02

## Major effects of soil acidification

Appendix 2. Summary of the effects/impacts of soil acidification developed by the steering committee, on aquatic and terrestrial biodiversity, agricultural production capacity Utilities and Industry due to declining soil health and fertility, loss of plant cover and surface water.

Industry					Utilities/ Infrastructure			Agricultural production capacity					Effects/impacts of acidification of soil on:	Terrestrial biodiversity		Aquatic biodiversity					
Loss of utility	Loss of amenity	Reduced developmental potential	Higher maintenance costs	Accelerated depreciation	Higher processing costs	Higher maintenance costs	Accelerated depreciation	Higher processing costs	Land salinisation	Reduced land capability	Higher processing costs	Erosion	Reduced traffic	Reduced options	Loss of habitat	Changed hydrolytic conditions	Stream salinisation	Loss of habitat	Changed flow regimes	Eutrophication	Sedimentation
		√	√	√	√	√	√	√		√	√	√		√	<b>Decline in soil health</b>						
		√	√	√	√	√	√	√		√	√		√	√	√			?	√		
		√	√	√	√	√	√	√		√	√		√	√	√	√				√	
															<b>Loss of plant cover</b>						
?	?		√	√	√		√	√				√			√		√	?	√	√	√
?	?	√	√	√	√	√	√		√	√			√	√	√	√	√	?	√		
?	?		√		√	√				√	√	√		√	√						
															<b>Decline in soil fertility</b>						
									√	√	√	√		√	√	√	√				
		√							√	√				√		√	√				
			√	√	√	√	√	√						√	√			?			√