



## ▶▶▶ Benefits of biodiversity - grain industry

The following table outlines a number of research facts that are directly related to the grain industry. If further information is required, refer to the cited scientific paper reference.

WINDBREAKS	
Sand blasting of cereal crops at the seedling stage leads to reduced plant growth due to moisture stress and physical damage.	Anderson, G., (1986). <i>The Effect of Trees on Crop and Animal Production</i> . Trees and Natural Resources, Vol. 28, No. 4. pp. 14-17.
An increased net cereal yield of 15% per annum was attributed to sheltering effects of windbreaks (USA).	Adamson, E., (1988). <i>The Relationship Between Trees and Rural Productivity: a literature review and annotated bibliography</i> . Ministry for Planning and Environment, Melbourne.
Windbreaks increased crop yields by 25%. Although trees rob the crop for a distance equal to about twice their own height, they shelter a much larger area, extending downwind for at least 15 times their own height (Overseas, not specified).	Dengate, J., (1983). <i>Windbreaks and shade trees help landowners and wildlife</i> . Habitat 11(1): 14-15.
An increase in wheat and crop yields in sheltered zones estimated between 22% and 47% (Rutherglen).	Bird, P. R., Bicknell, D., Bulman, P.A., Burke, S.J.A., Leys, J.F., Parker, J.N., van der Sommen, F.J., Voller, P., (1993). The role of shelter in Australia for protecting soils, plants and livestock, in Prinsley, R.T., Allnut, J., (eds). <i>The Role of Trees in Sustainable Agriculture</i> . Kluwer Academic Publishers, Dordrecht.
An increase in lupin yield by 19-22% when the area of shelterbelt was included in the net yield/ha, and an increase of 27% on the lupin crop area between the windbreaks (South-west Western Australia)	Richmond, E., (1992). <i>Economic Benefits to the Farmer of Maintaining and Protecting Remnant Native Vegetation on Farms in the South-west of Western Australia</i> . Water Authority of Western Australia, Leederville.