



Scarecrow Windsafe Fact Sheet

Strong and severe winds are one of the biggest problems growers have to face. Wind can be extremely damaging causing lesions to plants, breaking branches, lacerating flowers and leaves, bruising fruit or causing it to fall before its ripe. Wind can also create excessive evaporation and transpiration.

Positioning natural barriers such as long rows of trees have several disadvantages. Namely, the extra ground space taken, the depletion of valuable nutrients in the soil and the constant maintenance required. The most functional and immediate solution is the installation of artificial windbreaks, perpendicular to the direction of the predominant winds.

Investment in Scarecrow Windsafe windbreak fabrics in an agricultural environment can offer long-term benefits resulting in better quality and more abundant crops. Scarecrow Windsafe knitted windbreak fabrics come in two different porosity percentage grades: 35% (economy) and 60%, and two different widths.

Scarecrow Windsafe Pro is a premium quality knitted windbreak with 55% porosity, available in two widths and two colours.

How do the Scarecrow Windsafe fabrics work?

As well as protecting crops and plantations from strong winds, Scarecrow Windsafe fabrics help reduce mechanical damage, protect foliage from ravage and also avoid physiologic damages by preventing excess transpiration and soil erosion. Windsafe fabrics also protect against frosts and hails, and help enhance the micro-climate. In this way, photosynthesis and ground moisture is improved by reduced evaporation and transpiration. Scarecrow Windsafe fabrics also protect crops against harmful winds blown from the sea that have a high content of salt.

The use of Scarecrow Windsafe fabrics slows the wind in one place by deflecting it to another. It produces a zone behind the windbreak which will have wind of about a quarter of the speed. One metre high windbreak shields plants which are 10 metres from the windbreak. The calculated ratio is 1:10. For a 10m high windbreak this zone will extend about 50m downwind. From 50m to 100m, the wind speed will increase up to about half that of the incoming wind. Beyond that, wind speeds increase quickly.

Windsafe fabrics provide maximum protection when they are positioned at right angles to the wind direction and they should be at least twice the height of the crop being protected. The plants strength, height and planting intensity, as well as wind direction and intensity should be considered in designing wind breaks.

Scarecrow Windsafe will benefit field crops, vegetables, flowering plants and fruit-trees.