# Wind v Sun

Fixed wind-breaks attached to the roof of a glasshouse may do more harm than good. In Swedish tests aimed at reducing the wind speed along the roof of the house, and so curtailing heat loss, two tightly sealed houses were each clad with 16mm acrylic-coated polycarbonate. One was fitted with vertical wind-breaks at 8ft intervals along the roof.

Temperature records in each house show that the advantage derived from the wind-breaks under certain conditions, particularly at night, was counteracted by the shade they cast on sunny days, reducing solar transmission into the house by 8 to 10 percent. The unscreened house was 0.5C warmer at night after a sunny day, benefiting from heat stored in the floor of the house and in the concrete paths.

There were other disadvantages with the wind-breaks. Installation costs were high, the structures put more mechanical stress on the glasshouse roof and more snow accumulated when they were in position. Researchers believe that the money spent on installing the wind-breaks would be used more effectively to seal and insulate the glasshouse further. Separate wind-breaks erected away from the houses against the prevailing wind.