# Planting wildflower strips could save apple growers nearly £3,000 per hectare and cut pesticide use



A new study has revealed a promising strategy for apple growers: planting strips of wildflowers in orchards could significantly reduce reliance on chemical pesticides while simultaneously enhancing biodiversity and protecting crop yields. Conducted by researchers at the University of Reading and published in the Journal of Agricultural Economics, this innovative approach points to a natural solution that could save farmers up to £3,000 per hectare annually.

The rosy apple aphid, a notorious pest for apple growers, causes substantial crop damage by distorting young leaves and inhibiting fruit growth. Traditionally, growers have turned to chemical pesticides to combat these pests; however, escalating costs, increasing pest resistance, and tightening regulations have sparked interest in alternative methods that are less environmentally damaging. The study underlines the effectiveness of wildflower strips in attracting natural predators of the rosy apple aphid — including ladybirds, lacewings, and hoverflies — thereby lowering the need for chemical interventions. In orchards that incorporated wildflower strips during high infestation years, apple damage was recorded at just 4%, a stark contrast to the 12% damage observed in orchards without these floral installations.

Wildflower strips, which can be planted along the edges of orchards or between rows of trees, serve not only to attract beneficial insects but also to improve soil health, enhance pollination, and provide habitats for various wildlife. Dr Charlotte Howard, one of the researchers, stated, “Farmers could save money while boosting biodiversity and letting nature do some of the heavy lifting in looking after their crops.” This indicates a shift in perspective towards more sustainable farming practices that harness ecological processes rather than relying exclusively on chemical solutions.

The financial implications of this research are compelling. The estimated savings of up to £2,997 per hectare in pest-heavy years suggests significant cost benefits for growers, particularly when combined with existing government incentives such as payments for establishing wildflower strips. Some schemes currently offer up to £673 per hectare annually, reinforcing the economic viability of this approach. Notably, the study found that the location of these flower strips is more critical to success than their duration or the level of financial support received.

Beyond their economic merit, the environmental benefits of wildflower strips cannot be overlooked. These floral patches contribute positively to biodiversity, offering crucial habitats for pollinators and other beneficial species. Furthermore, wildflowers enhance the aesthetic appeal of farm landscapes, support carbon storage, and improve water retention in soils, thereby mitigating the ecological footprint of agricultural operations. The researchers noted that improvements in biodiversity and landscape aesthetics, while difficult to quantify, are significant advantages to implementing wildflower strips in farming systems.

However, the researchers are careful to note that this method is not universally applicable to all contexts. The effectiveness of flower strips can vary based on the specific pest threats, local environmental conditions, and the management practices of individual farms. Some trial sites recorded less impact, pointing to the need for further research, particularly regarding the efficacy of planting wildflowers between tree rows versus along the edges.

Nevertheless, the findings suggest that wildflowers present a promising tool for apple growers. As the agricultural sector faces dual pressures from economic challenges and environmental concerns, encouraging a symbiotic relationship with nature through practices like these could represent one of the most straightforward and effective paths forward for sustainable farming.

By embracing flower strips, apple growers stand to not only safeguard their crops but also foster a healthier environment for future generations, ultimately demonstrating that nature-based solutions can provide substantial benefits for both agriculture and the ecosystem as a whole.

Source: [Noah Wire Services](https://www.noahwire.com)

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