

SUMMARY

12/06/2025 – When nudges backfire: evidence from a randsomised field experiment to boost biological pest control.

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Nudges are increasingly used to alter the behaviour of economic agents as an alter-native to monetary incentives. However, little is known as to whether nudges can backfire, that is, how and when they may generate effects opposite to those they intend to achieve.

We provide the first field evidence of a nudge that is designed to encourage pro-environmental behaviour, which instead backfires. We randomly allocate a social comparison nudge inviting winegrowers to adopt biological pest control as an alternative to chemical pesticide use. We find that our nudge decreases by half the adoption of biological pest control among the largest vineyards, where the bulk of adoption occurs. We show that this result can be rationalised in an economic model where wine-growers and wine-grower cooperative managers bargain over future rents generated by the adoption of biological pest control.

This study highlights the importance of experimenting on a small scale with nudges aimed at encouraging adoption of virtuous behaviours in order to detect unexpected adverse effects, particularly in contexts where negotiations on the sharing of the costs of adoption are likely to occur.