

## Academies review insecticide harm

The European Academies Science Advisory Council (EASAC) will next week release its report 'Ecosystem services, agriculture and neonicotinoids', which scrutinizes the scientific evidence for harmful effects by neonicotinoid insecticides. It concludes that widespread preventive use of neonicotinoids has adverse effects on non-target organisms that provide ecosystem services such as pollination and natural pest control.

The EASAC report goes beyond honeybees to include other valuable pollinators, such as bumblebees and solitary bees, and looks at ecosystem services that are crucial to sustainable agriculture. It is based on the findings of an international group of independent scientists, which I chaired, with expertise ranging from pollination biology through systems ecology to toxicology (see [www.easac.eu](http://www.easac.eu)).

The report points out that the preventive use of neonicotinoids is inconsistent with the principles of integrated pest management, as expressed in the European Union's (EU) sustainable pesticides directive. Such usage also constrains the potential for restoring farmland biodiversity under the EU agri-environment regulation. The group notes that neonicotinoids also have sublethal effects that need to be fully addressed in EU approval procedures.

The European Commission is due to review the effects of its 2013 restriction on the use of neonicotinoids on flowering crops. I believe that our report will help the European review to reassess the risk–benefit balance of neonicotinoid application. The wider risks to the environment and longer-term sustainability of agriculture must be considered alongside concerns that further restrictions could have short-term implications for the economy and for food security.

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