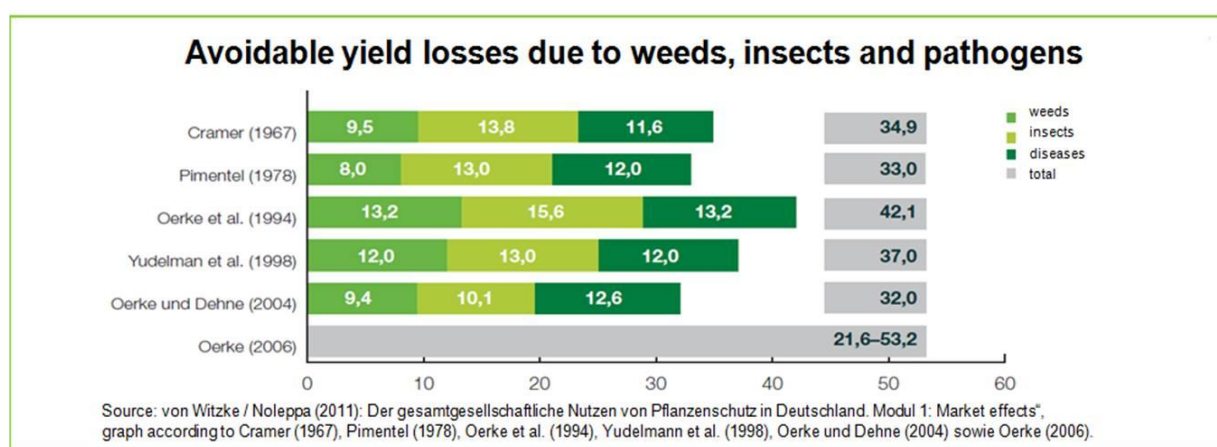


Agricultural trio: Modern crop protection, stable yields, secure food supply

Herbicides, insecticides and fungicides – these substances usually do not receive public attention for their track records but because of critics who publicly blemish these products as agricultural poisons.

This accusation is in contrast to scientific studies which give clear evidence that modern crop protection provides valuable social benefits. In case these active substances were abandoned, average yields in arable farming would be about one third smaller than today on a world-wide scale.



The difference even increases in countries such as Germany where favourable climatic conditions coincide with a particularly modern agriculture. According to figures published by the German Ministry of Food, Agriculture and Consumer Protection, farmers abstaining from modern crop protection recently only achieved 45% of wheat yields of conventional farms. In relation to the expected total German wheat yield of 24 million tonnes in 2013, this would mean a reduction by 13 million tonnes of this valuable raw material. This should not lead to worries with regard to bread and bread roll supply in a well-heeled economy such as Germany – except for the price. Missing amounts of grain could still be imported, but only at the cost of other regions where these products would then be missing.

Taken a per capita consumption of 66 kg/year at the prime location Germany, an amount of wheat sufficient for almost 200 million people would simply not be produced in this case.

Modern crop protection management allows for high resource use efficiency in the production of agricultural raw materials, avoids yield losses and improves the global food supply. For Germany as agricultural location, there are additional positive effects: higher incomes of farmers and people employed in agriculture as well as positive impacts on climate, energy and environmental balances. The efficient use of the soil as a natural resource is just one example. The appropriate use of crop protection products leads to multiple positive effects for society at large and thus for the sustainable development of economic wealth.

Sources: Von Witzke / Noleppa (2011): Der gesamtgesellschaftliche Nutzen von Pflanzenschutz in Deutschland. Model 1: Markteffekte, http://www.agrar.hu-berlin.de/fakultaet/departments/daoe/ihe/Veroeff/psm_markteffekte_final.pdf, S. 4
Erntebericht des Deutschen Bauernverbandes 2013: <http://www.bauernverband.de/erntebericht-2013>