

Pesticides and pharmaceuticals

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Despite increasing longevity many fear that pesticides are killing us and our environment.



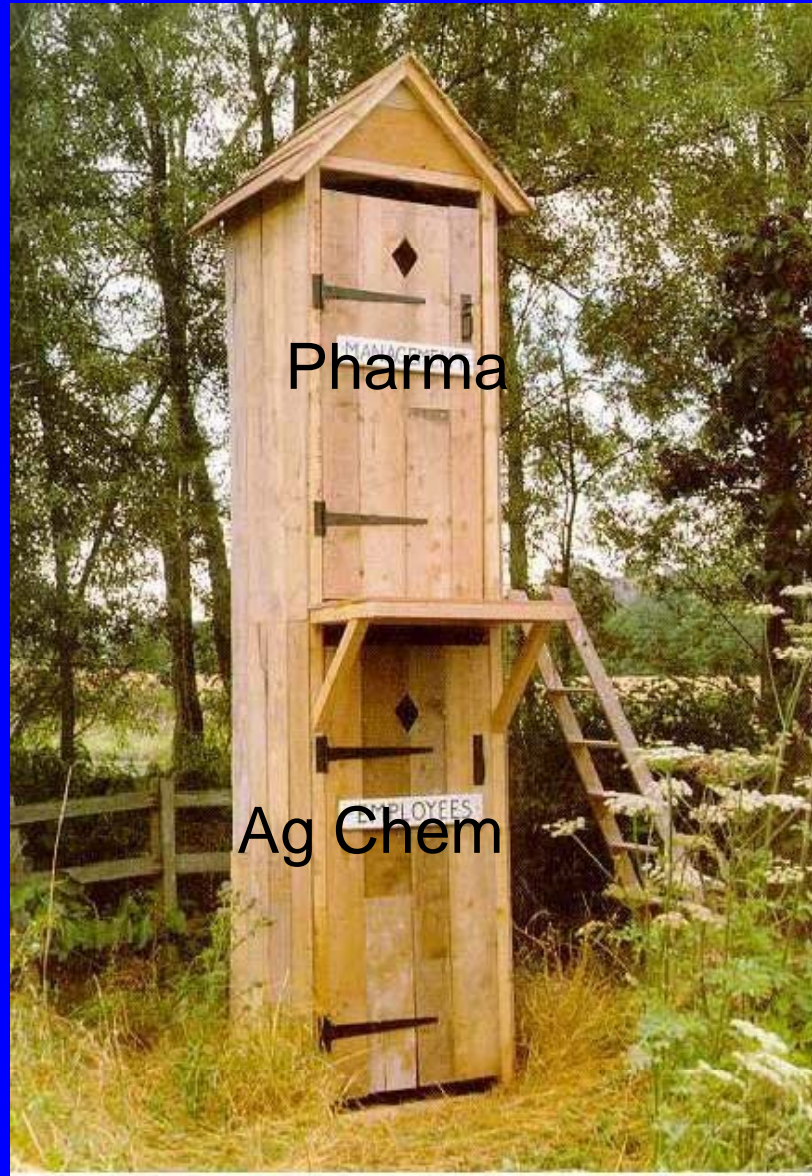
Statement of the problem

- ❖ Pesticides and Pharmaceuticals are closely related
- ❖ Many in our society have a negative view of pesticides and a more positive view of pharmaceuticals.
- ❖ Is there any value in pointing out this contradiction to the general population?

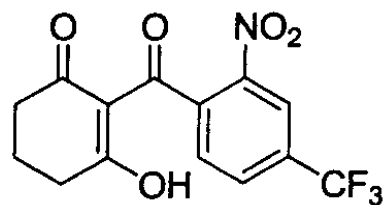
Historically Pesticide & Pharmaceutical Co's were together

- ❖ Abbott
- ❖ Bayer
- ❖ Eli Lilly and Elanco
- ❖ Novartis – Ciba Geigy
- ❖ ICI/Zeneca and Stuart/AstraZeneca
- ❖ Pharmacia and Monsanto

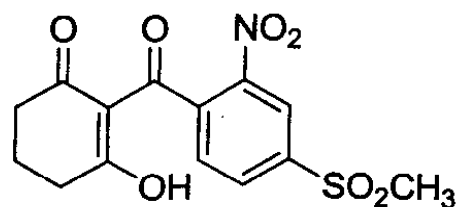
**Although
Pesticide and
chem.
companies
were “together”
it was not a
relationship
among equals!**



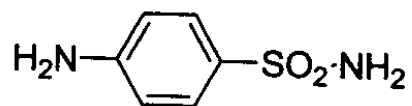
Similarities



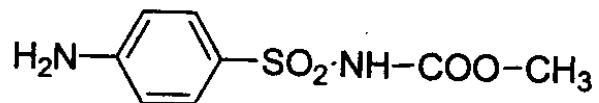
NTBC



mesotrione



sulfanilamide



asulam

Figure 1. Structures of pharmaceuticals and structurally related herbicides.

Examples of herbicides and pharmaceutical similarities

- ❖ Sulfanilamide is a sulfa class of antibiotic and is closely related to the herbicide asulam

Herbicides as antiparasitic drugs

- ❖ Plasmodium spp. Is a group of protozoan parasites that cause malaria.
- ❖ Herbicides that have activity against malaria are glyphosate, clomazone, trifluralin, endothal and many others.

Pesticide or antifungal medication?

- ❖ Fluconazol- diflucan a pharmaceutical fungicide is also patented as an ag chem.
- ❖ Spinosad is registered as Comfortis an oral flea medication for dogs is also a pesticide Entrust.

Contradictions

- ❖ The reason the agricultural chemical industry is so vulnerable is that it is small and easy to attack.
- ❖ The general population is familiar with pharmaceutical and get much information from their Doctor.
- ❖ Whereas so much of the information about pesticides comes from unreliable sources that have much disinformation.
- ❖ Is there value in speaking up for pesticides?