

3.0 Potential to Develop Novel CW Agents

3.1 Chemical Agents (Toxicants)

The search for novel chemicals, useful in preventing or combating disease, is a laudable goal. To some, it may appear that human inventiveness has its limits, and that just about everything that can be invented has been invented. This is most certainly not the case. Indeed, the chemical and pharmaceutical industries are constantly searching for better, more effective chemicals to be used for peaceful purposes. One good example is the family of pesticides, which includes insecticides, herbicides, fungicides, etc. The heavy use of some pesticides has led to the evolution of pesticide-resistant pests, and the industry has to experiment with novel compounds, including modifications of existing ones. This does not necessarily mean that the new compounds are more toxic. The contrary is true in some instances, because environmental concerns dictate that new generations of pesticides ought to be less harmful to non-target species than "older" pesticides. However, during this search for novel compounds, it is equally possible that new, more lethal compounds may be found.

A parallel - in many ways much more disturbing - may be found in the activities of producers of illicit drugs who modify the structure of these substances to make "designer drugs" that either do not fall under the currently valid legal restrictions/descriptions or are cheaper to make.

Finally, "old," existing and already used compounds may undergo review with respect to novel use. Robinson (1982) has referred to training/riot control agents, or immobilizing drugs intended for use in animals, that may seem as suitable for warfare purposes.