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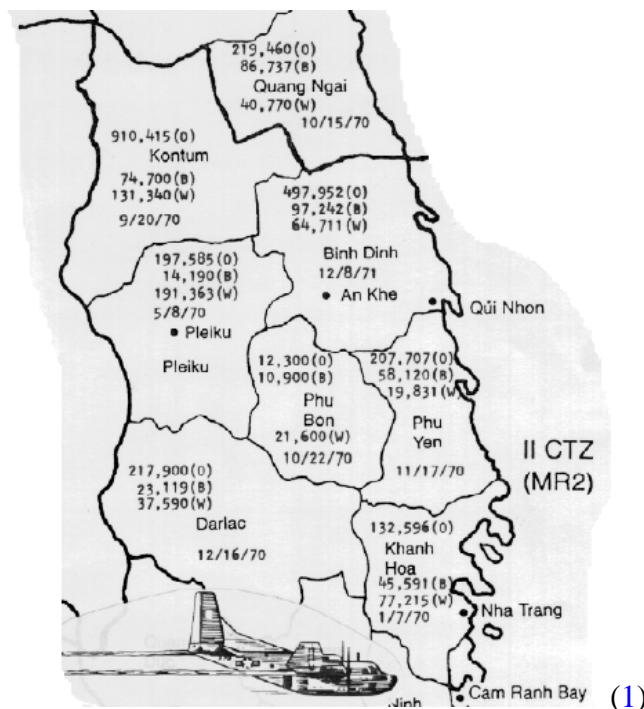
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# Agent Orange

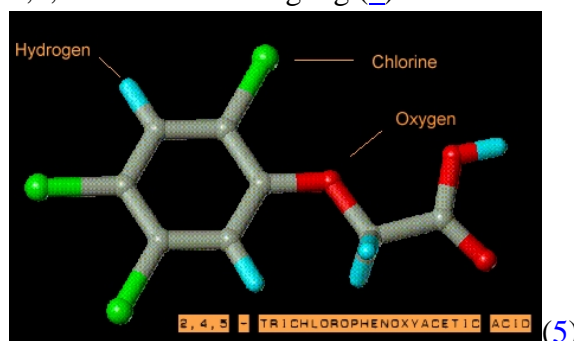
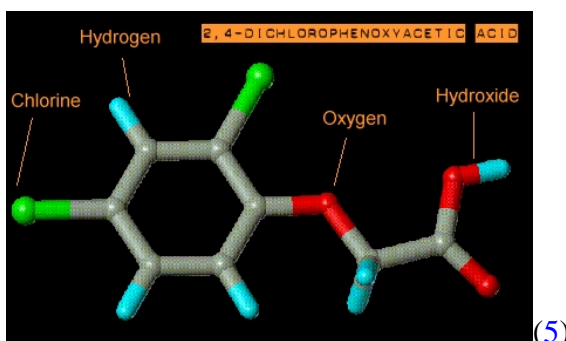
Agent Orange was the most widely used defoliant in Vietnam. It was used between 1965-1970 (1), and over 60% of all herbicide used in Vietnam was Agent Orange (2). Agent Orange was sprayed heavily along the borders of Laos, Cambodia, and North Vietnam, with some crop destruction missions in the north east of South Vietnam



Agent Orange is composed of two active chemicals: 2,4-dichlorophenoxy acetic acid (2,4-D), and 2,4,5-Trichlorophenoxy acetic acid (2,4,5-T) (1). Some chemical info on these components is as follows:

2,4-D (3)  
 MW= 221g/mol  
 $C_8H_4Cl_2O_3$   
 b.p. 160°C  
 m.p. 138°C  
 2,4-D LD50- 500 mg/Kg (3)

2,4,5-T (4)  
 MW= 253g/mol  
 $C_8H_5Cl_3O_3$   
 Contaminated with dioxin (1.77-40 ppm)(2)  
 b.p.- decomposes  
 m.p.- 153°C  
 2,4,5-T LD50- 300 mg/Kg (4)



The controversial part of Agent Orange is the side product of 2,4,5-T synthesis, which is dioxin