

ABSTRACTS

the dihydrazide. It was also observed that the dihydrazide had stronger inhibitory action than the monohydrazide upon glutamic acid decarboxylase of *E. coli*. The antagonism of hydrazides to aspartic acid was non-competitive in all the cases but growth inhibition of *E. coli* was more easily recovered by asparagine rather than by aspartic acid. Consideration were made on the biological activity of amino acid hydrazides from foregoing experimental results.

**Antagonistic Action of CNS Stimulants against
Barbiturates in Mice**

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After Maloney *et al.* (1931) reported that Picrotoxin reduced anesthesia by barbiturate, antagonistic action of many kinds of CNS stimulants against barbiturates has been observed by various workers. But the comparative evaluation of their actions is not yet sufficient.

In this paper, the comparison was made with antagonistic action of LD 50 CNS stimulant against barbiturate hypnosis and, of 1/2 LD 50 CNS stimulant against Evipan Sodium LD 50. The results obtained are shown in the following table.

CNS stimulant	Antagonistic effect in mice		
	to Veronal hypnosis	to Evipan hypnosis	to Evipan toxicity(LD 50)
Picrotoxine	‡	‡	‡
β -methyl- β -ethyl glutarimide	†	‡	‡
Metrazol	†	†	‡
N,N'-Dibutyl-N,N'-dicarboxy morpholide ethylendiamine	+	+	†
Strychnine	+	-	+
Coffeine sodium benzoate	-	-	±
Methamphetamine	-	-	-

‡ Marked, † moderate, + slight, ± none, - on the contrary, synergistic.

Pharmacology of Benzhydrol Derivatives

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