

Anyway, it would appear to be a better practice to keep insecticides and fertilizers separate. Without allowing any value for the other materials, the Paris green in this mixture would cost \$2.41 per pound.

Slug Shot: Slug Shot is essentially crude gypsum mixed with small quantities of Paris green, tobacco, and carbolic acid. It is sold in Guelph at 10 cents per pound, or 3 pounds for 25 cents. In larger quantities it can be bought for much less. The detailed results of our analysis are as follows:

Moisture	13.55
Sand, etc.	3.53
Insoluble matter (sulphur, tobacco, etc.)	5.69
Calcium oxide	30.10
Sulphur trioxide	37.93
Iron and aluminum oxides	0.80
Carbon dioxide	2.79
*Paris green	2.13
Phenol, soluble organic matter, etc. (by difference)	3.38
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	100.00

Carbolic acid is a poison, and as such will, no doubt, destroy insects as well as the Paris green; but this mixture at even 5 cents per pound is rather an expensive substance to use in destroying potato bugs.

Bug Death: Another insecticide, containing no arsenic, that has recently come into great prominence, is Bug Death. It is claimed that it kills the bugs, feeds the plant, increases the yield, and improves the quality. It is sold at the rate of 12 pounds for \$1, or 100 pounds for \$7. The following is the composition of samples secured in 1902 and 1903:

	1902.	1903.
Moisture	0.32	0.38
Volatile matter	2.67	2.87
Sand, etc.	3.17	4.26
Lead oxide	3.17	4.70
Zinc oxide	87.47	83.04
Iron oxide	3.84	4.09
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	100.64	99.34

It is composed largely of crude zinc oxide with small quantities of lead oxide and iron oxide. It also contains nitrogen equivalent to about one-half of one per cent. of ammonium sulphate. This latter substance is a plant food; but there is so little of it in the mixture that it cannot have much value. Bug Death has considerable fungicidal value, and destroys

*Copper oxide, .64 per cent.; arsenic trioxide, .82 per cent.