

<i>B. anth.</i> in poison	15 m.	1	2	3	4	5	6	7	8 hours	
1.9% ph. + 5% NaCl (2.6)	179	78	72	31	70	59	48	42	40	colonies
3.0% phenol	118	184	149	79	61	52	75	75	55	colonies
3.5% phenol	176	163	118	90	54	27	42	48	45	colonies
2.5% ph. + 5% NaCl (3.6)	179	78	72	31	70	59	48	42	40	colonies
1.9% ph. + 10% NaCl (3.9)	122	40	31	10	10	4	1	4	2	colonies
4.0% phenol	169	115	58	64	10	24	16	17	11	colonies
2.5% ph. + 10% NaCl (5)	90	16	0	0	0	0	0	0	0	colonies

Comparison of these four sets, shows that even when working with every care, duplicate results are not to be expected; the trouble lies, no doubt, in the uneven distribution of the spores in the suspensions from which measured volumes are taken for inoculation and for culture. The results, however, leave no doubt that the toxicities of the phenol-salt solutions are about equal to those of their salt-free equivalents.

A fifth set was undertaken, including 1.22 percent phenol with 10, 15 and 20 percent salt. In this case the culture after 16 hours in the incubator was kept for 6 days at room temperature, the growth washed off as usual with 10 cc 0.6 percent brine, heated in the tube of a centrifuge for 30 minutes to 70° C, agitated to break up clumps, and then centrifuged at high speed. Two loops of this (first) suspension were used to inoculate 10 cc of each of the poisons, and after standing in a water bath (whose temperature varied from 38° C to 44° C) for the time noted, one loop was used to infect the 10 cc of agar; the "machine" was used, and the same small platinum tube that was used in the experiments with staphylococcus.

With the exception of the solution containing 1.22 percent phenol and 15 percent salt, the order of toxicity is that of the equivalent solutions; the results obtained with this exceptional solution are abnormal also in the relatively large count after one hour, followed by a rapid decrease to zero.