from the Step 7 (final) supernatant was mixed vol:vol with centrifuged healthy cowpea sap prepared as in (*b*) with the solvent treatment omitted. Specimen grids were prepared and the particles were counted as in the above experiment, and the results are presented in Table 2, Experiment 2.

The results of this test reinforced the findings of the preceding test: The first supernatant (*b*), which presumably retains most of the site-competing elements found in sap, had only 4% of the number of virions found in the solvent-treated control mixed with buffer (*a*). When the solvent-treated fraction was mixed with untreated sap (*c*), the virion numbers were reduced to 16% of the same control (*a*).

Table 2. Effects of added healthy plant extracts on the numbers of cowpea mosaic virus particles detected by electron microscopy[a]

	Treatment[b]	No. of fields examined	Total No. of particles	Average No. particles/field	% of control
Experiment 1	Purified CpMV[c] plus buffer[d] (control)	200	3,987	20	100
	Purified CpMV[c] plus cowpea extract[e]	200	343	1.7	9
	Purified CpMV[c] plus tobacco extract	200	168	0.8	4
	Purified CpMV[c] plus clarified cowpea extract[f]	200	3,194	16	80
Experiment 2	CVC-derived CpMV[g] plus buffer[d] (control-1)	100	997	10	100
	CpMV infected cowpea extract[e] plus buffer[d] (control-2)	100	39	0.4	4
	CVC-derived CpMV[g] plus cowpea extract[e]	100	161	1.6	16

[a]Magnification in all cases was 400,000×.

[b]All mixtures were made vol:vol.

[c]Purified CpMV at a concentration of 2.5 mg/ml.

[d]0.1 M potassium phosphate, pH 7.5.

[e]The plant extracts were the supernatants from the following treatment: healthy leaf tissues were triturated in 0.1 M potassium phosphate, pH 7.5, at the rate of 1 g/2 ml. The pulp was expressed through cheesecloth and centrifuged for 5 min at 12,200 × *g*.

[f]Plant extracts prepared as in footnote *e* above and clarified by the addition of 6.5% *n*-butanol to the phosphate buffer.

[g]Supernatants from Step 7 of CVC variation B (see "Materials and Methods").