

Rank	No. of citations	Title
1.	3288	Phytopathology (self-citation)
2.	476	Plant Dis. Reporter
3.	320	Virology
4.	240	Canad. J. Bot.
5.	204	Plant Physiol.
6.	188	Amer. J. Bot.
7.	184	Nature
8.	164	Ann. Appl. Biol.
9.	164	Annu. Rev. Phytopathol.
10.	148	Phytopathol. Zschr.
11.	144	J. Agric. Res.
12.	120	Science
13.	88	J. Bacteriol.
14.	88	J. Biol. Chem.
15.	80	Mycologia
16.	76	Agronomy J.
17.	76	J. Gen. Microbiol.
18.	72	Trans. Brit. Mycol. Soc.
19.	68	Annu. Rev. Plant Physiol.
20.	60	Austr. J. Biol. Sci.
21.	60	J. Econ. Entomol.
22.	60	Soil Sci.
23.	56	Crop Sci.
24.	56	J. Agric. Food Chem.
25.	52	Ann. Phytopathol. Soc.
	4788	All Other (731 other titles)
	11320	Total

Figure 1. List of journals cited by *Phytopathology*.

Rank	No. of citations	Title
1.	3288	Phytopathology (self-citation)
2.	1164	Annu. Rev. Phytopathol.
3.	184	Trans. Brit. Mycol. Soc.
4.	168	Canad. J. Bot.
5.	120	Mycologia
6.	112	Mycopathol. Mycol. Appl.
7.	76	Virology
8.	72	Ann. Appl. Biol.
9.	68	Botan. Rev.
10.	60	Canad. J. Microbiol.
11.	56	Canad. J. Plant Sci.
12.	56	Hilgardia
13.	56	Theoret. Appl. Genetics
14.	48	Amer. Potato J.
15.	48	Crop Sci.
16.	48	J. Econ. Entomol.
17.	40	Science
18.	36	J. Bacteriol.
19.	36	J. Gen. Microbiol.
20.	32	J. Stored Prod. Res.
21.	28	C.R. Acad. Sci. D
22.	28	IIRB
23.	28	J. Nematol.
24.	28	Nat. Cancer Inst. Monogr.
25.	28	Radiation Res.
	944	All Other (99 other titles)
	6852	Total

Figure 2. List of journals that cited *Phytopathology*

Rank	Times Cited	Title
1.	416	<i>Acta path. microb. scand.</i> (self-citation)
2.	240	<i>Nature</i>
3.	148	<i>J. Exp. Med.</i>
4.	116	<i>J. Nat. Cancer Inst.</i>
5.	108	<i>Ann. N.Y. Acad. Sci.</i>
6.	104	<i>Arch. Pathol.</i>
7.	104	<i>J. Bacteriol.</i>
8.	96	<i>Amer. J. Pathol.</i>
9.	96	<i>Ann. Human Genetics</i>
10.	96	<i>Proc. Soc. Exp. Biol. Med.</i>
11.	80	<i>Ann. Eugenics</i>
12.	80	<i>J. Histochem. Cytochem.</i>
13.	80	<i>Lancet</i>
14.	76	<i>Biochem. J.</i>
15.	76	<i>J. Biol. Chem.</i>
16.	72	<i>Circulation</i>
17.	72	<i>J. Med. Microbiol.</i>
18.	68	<i>Amer. J. Human Genetics</i>
19.	64	<i>C.R. Acad. Sci.</i>
20.	64	<i>Lab. Invest.</i>
21.	60	<i>Acta genet. med. gemell.</i>
22.	60	<i>J. Immunol.</i>
23.	56.	<i>J. Cell Biol.</i>
24.	52	<i>Virology</i>
25.	48	<i>Cancer Res.</i>
	4408	All Other (601 other titles)
	6940	Total

Figure 3. List of journals cited by *Acta Path. Microb. Scand.*

Rank	Times Cited	Title
1.	172	<i>Nature</i>
2.	132	<i>J. Bacteriol.</i>
3.	124	<i>Virology</i>
4.	120	<i>J. Gen. Microbiol.</i>
5.	116	<i>J. Biol. Chem.</i>
6.	116	<i>J. Molec. Biol.</i>
7.	92	<i>Cancer Res.</i>
8.	76	<i>Ann. N.Y. Acad. Sci.</i>
9.	72	<i>Biochem. Biophys. Acta</i>
10.	72	<i>Proc. Soc. Exp. Biol. Med.</i>
11.	64	<i>Biochem. Biophys. Res.</i>
12.	60	<i>Ann. Inst. Pasteur</i>
13.	60	<i>Lancet</i>
14.	60	<i>New Engl. J. Med.</i>
15.	60	<i>Science</i>
16.	56	<i>J. Virology</i>
17.	52	<i>Biochem. J.</i>
18.	52	<i>J. Exp. Med.</i>
19.	52	<i>Presse Med.</i>
20.	44	<i>Arch. Biochem. Biophys.</i>
21.	44	<i>Pathol. Biol.</i>
22.	40	<i>Canad. J. Microbiol.</i>
23.	36	<i>Biokhimiya</i>
24.	36	<i>Endocrinology</i>
25.	36	<i>Proc. Nat. Acad. Sci. US</i>
	2464	All Other (400 other titles)
	4308	Total

Figure 4. List of journals cited by *Pathol. Biol.*

than citing journals, we find a similar situation. The five most cited pathology journals are:

Title	Estimated Times Cited
<i>Amer. J. Pathol.</i>	5592
<i>Arch. Pathol.</i>	4432
<i>Naunyn-Schmiedebergs Arch. exp. Pathol. Pharmacol.</i>	3044
<i>J. Clin. Pathol.</i>	2576
<i>Brit. J. Exp. Pathol.</i>	2420

Only the *Brit. J. Exp. Pathol.* is cited significantly by virology journals; the other four are not. As with *Pathologie Biologie*, *Brit. J. Exp. Pathol.* evidences little interest in plant disease, being devoted to "causation, diagnosis, and cure of disease in man."

It is apparent that while the study of virology has had its impact in plant disease studies and in molecular biology and biochemistry, it does not yet seem to have a direct impact on the literature of human pathology, as far as citation practice can reveal it. Indeed the impact on cancer research is far more evident. Does this possibly indicate that the field of "applied virology" is yet to be

developed? If this conclusion is valid, it is easier to understand why an article such as ter Meulen and Koprowski's recent report on viral factors in multiple sclerosis⁴ appeared in a general medical journal rather than in one of the specialty virology journals. Indeed, if there exists a literature of applied virology, then it is probably scattered through the general medical literature.

1. Garfield, E. Most frequently cited phytopathology journals. *Phytopathol. News* 6(3):4, 1972.
2. -----. ISI's *Journal Citation Index* data base, a multi-media tool. *Current Contents* No. 16, 19 April 1972, p. 5-8.
3. -----. Citation analysis as a tool in journal evaluation. *Science* 178:471-479, 1972.
4. ter Meulen, V., Koprowski, H. et al. Fusion of cultured multiple-sclerosis brain cells with indicator cells: presence of nucleocapsids and virions and isolation of parainfluenza-type virus. *Lancet* (1972)II:1-5, 1 July 1972.