

Phytochemists Aren't Perfect—But Almost

Janzen¹ has expressed an opinion that phytochemists and others reporting on the isolation of secondary chemical compounds from plants often fail to indicate the specific plant part from which the compounds originate. This omission appears to be hindering biologists interested in relating plant and animal biology, more specifically, herbivore-eating habits.

We have been computerizing the world literature on natural products since before 1975 in a system referred to as NAPRALERT. We include the specific plant part(s) from which chemical compounds are isolated and/or identified (including percentage yields when they are stated or can be calculated). It was thought to be of interest to query the computer to determine all publications that have been computerized since 1975 in which the authors failed to specify the plant part from which compounds were isolated. We did not determine the total number of papers involved; but from experience, it can be presumed that about 50% of the papers we computerize involve the isolation and/or identification of secondary principles from plants. For purposes of determining this information, we considered all gymnosperms, angiosperms, pteridophytes, bryophytes, and lichens to constitute "plants." The results are presented in the accompanying table. None of the "organless" reports appeared in *J. Pharm. Sci.*

In 1975–1978, the 73 papers in which plant parts were not indicated when results of isolation studies were reported were derived from a total estimated number of papers published on this subject of about 5000. Since about one-third of the data in the 73 "organless" papers was computerized from abstracts rather than from original manuscripts, it cannot be said with certainty that those original reports failed to include the plant part(s).

Unless Janzen has found a source of phytochemical papers that has eluded us, he does not have much of a case relative to the aforementioned criticism.

Norman R. Farnsworth

William D. Loub

Department of Pharmacognosy and
Pharmacology

College of Pharmacy

University of Illinois at the Medical Center
Chicago, IL 60612

Received January 29, 1979.

¹D. H. Janzen, *J. Pharm. Sci.*, 68 (1), VIII (1979).

Numbers of Publications Reporting Isolation of Secondary Constituents from Plants in which the Plant Part Studied Was Not Reported (1975–1978)

Country	Year of Publication			
	1975	1976	1977	1978 ^a
Bangladesh	0	0	1	0
Brazil	0	1	0	0
Bulgaria	0	0	1	0
China (People's Republic)	0	0	2	0
Czechoslovakia	0	1	1	0
England	0	1	1	0
Finland	0	0	1	0
France	1	1	2	1
Germany (West)	1	3	2	1
Hungary	0	0	2	0
India	1	2	0	1
Japan	2	1	4	0
Nigeria	0	2	0	0
Pakistan	0	0	0	1
Philippines	0	1	0	0
Poland	0	1	0	0
Sweden	0	0	1	0
Taiwan	1	0	0	0
Republic of South Africa	0	0	1	0
United States	1	6	3	0
Russia	10	8	2	0
Total	17	28	24	4

^a Incomplete for 1978.

Senior Research Pharmacist

Does the milder climate of a southern metropolitan atmosphere (seldom any snow) appeal to you?

Immediate opening in our Pharmacy Research Department for a Ph.D. Pharmacist with 0–3 years of formulation experience. Responsibilities include formulation of solids and liquids and scale up to manufacturing.

Pleasant and professional working environment with excellent benefits and competitive salary based on background and experience.

Send resume and salary requirements in confidence to:

Manager of Personnel Placement

A-H-ROBINS

1407 Cummings Drive
Richmond, Virginia 23220

See our representative in Anaheim in April.

EOE

M/F

PHARMACEUTICAL PROFESSIONALS

We are a 13 million dollar division of an international conglomerate with 26 divisions throughout the nation. The technical division of Wells Recruiting Systems specializes in the placement of pharmaceutical professionals. Our consultants are degreed technical specialists compensated on a salary basis to assure permanent relationships with discriminating professionals in the pharmaceutical industry. Our Fortune 500 clients seek degreed candidates from the B.S. to Ph.D. level with exposure to any of the following areas.

Pharmaceutical Product Development

Ph.D. with experience in all phases of product development. Familiarity with process and pilot plant scale up a must. Should have good exposure to GMP and FDA regulations.

Senior Research Pharmacist

Ph.D. with 2 to 5 years industrial experience in the development of pharmaceutical solids, liquids, and semi-solids. Should have some supervisory experience.

Research Pharmacist

B.S. to Ph.D. with 1 to 3 years industrial experience in percutaneous absorption, skin permeation and semi-solids and solids.

Pathology

Requires a M.D. or D.V.M. with 2 to 5 years experience in the area of complete pharmaceutical pathological studies. Will be responsible for development and expansion of present facilities. Pathology board certification a plus.

Toxicology

Requires a Ph.D. and 2+ years industrial experience in the areas of mutagenicity testing. Should be familiar with Ames, DNA repair and kill testing. Ability to supervise a group of 5 or more professionals.

Clinical Research Associate

M.S. to Ph.D. with 2 to 3 years experience in the Phase II, III, IV testing of C-V, CNS, Anti-Inflams, Anti-Infectives and Antibiotics.

Analytical Ph.D.

1 to 5 years experience in the area of Methods Development. Should be familiar with assay development and should have good experience in HPLC techniques.

Any inquiries will be treated with the strictest confidence and are fee paid by our clients.

Phil Sanford M.T. (ASCP)—Pharmaceutical Division
WELLS RECRUITING SYSTEMS
1620 Route 22, Union, N.J. 07083 (201)-964-9100