

The Status of Support for Forest Pathology Research

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Intensive efforts are being made at the national level to develop long-range plans for all phases of scientific research, and major federal agencies are establishing priorities for funding of research areas that are likely to return high scientific dividends. As a result of such priorities, certain research areas related to biotechnology in the field of plant pathology have had an influx of federal and state funds. Other essential areas, however, are suffering from an erosive decline in support.

One such area is research in

forest pathology. Forest pathology (in the broad sense) has the challenging responsibility of reducing losses from diseases of both forest and shade trees as well as from decay of wood in service. The major importance of this field of research needs to be emphasized when one considers the economic and aesthetic value of trees and forest products. Abundant supplies of old-growth timber have vanished while diseases continue to take an unacceptable toll. Furthermore, disease losses will increase as management of forests, nationwide and worldwide, is intensified. The possibly destructive long-term effects of air pollution, acid deposition, and the greenhouse phenomenon have not yet been adequately evaluated. Recent reports of large-scale death of trees in Europe, however, are indications of what may become a reality in parts of North America. Unfortunately, the current view that supply of pulp and wood products in the United States is adequate for present and immediate future needs has created a false sense of security. Thus, the disturbing steady decline of support for forest pathology in the United States and Canada has reached a point that demands the attention of all pathologists, the forest industry as a whole, and all citizens concerned with the quality of our environment.

With the assistance of members of the APS Forest Pathology Committee, the current support for forest pathology in the United States has been compared with such support over the past two decades. Data on funds specifically allocated to support forest pathology are not readily obtained. Thus, the study was based on the number of scientists, support staff, and graduate students in the United States. Symptomatic of the decrease in funding is the precipitous decline (42%) in the number of graduate students in forest pathology since 1966. The number of forest pathologists in university positions has also seriously declined, and this is likely to continue as student enrollments in schools of forestry decrease. In one university that was a major center for forest pathology research in the early 1960s, three of six positions have been lost. The major decrease in research personnel, however, has occurred in the U.S. Forest Service—a 32% decrease in research positions from 1965 to 1986. The number of forest pathologists in the

Canadian Forest Service has also decreased, from 44 during 1968–1970 to 27 in scientist years during 1980–1983. Another disturbing factor is the upward shift in the age of research pathologists in the U.S. Forest Service. At present, 53% are over 50 years of age, and only 11% are younger than 35. The drastic loss of experienced personnel during the next decade plus the lack of funding for replacements raises serious questions as to how effectively major research problems can be resolved in the future.

A few states have increased funds to support forest pathology research during the past decade, but when calculated in constant dollars, these increases do not begin to compensate for the decline in U.S. Forest Service funds. Ironically, overall research support is decreasing at a time when disease losses in certain regions are projected to intensify in the immediate future.

Another cause for concern is the fact that the number of undergraduates enrolling in schools of forestry dropped precipitously between 1975 and 1986. Enrollments in 1986 were the lowest since 1969. The evidence is that this general decrease will continue. By 1983, first-year enrollments had decreased 47% since 1976 and 31% since 1980. The entrance-examination scores for forestry freshmen have also declined during the past decade, and fewer National Merit Scholars are entering the field of forestry than in the past. Because of enrollment declines, the demand for courses in forest pathology has decreased and support for teaching positions that usually have a research component is also declining. Forestry programs at some universities probably will be terminated during the next few years. It is quite apparent that if the decline in graduate enrollments and the loss of experienced faculty members continue, there will not be an adequate source of trained scientists in the near future.

The problem of declining support for forest pathology is being intensified by pressure to limit all federal funding of research as one means of reducing the national debt. A number of actions must be initiated as soon as possible. It is imperative that the Council and the officers of APS examine this matter and make appropriate representations at the federal level to call attention to this serious problem. The Forest Pathology Committee is preparing a full report on the present situation, and the data compiled will be available for consideration by APS officers and state and federal administrators. The Society of American Foresters and other national organizations concerned with renewable natural resources should be contacted and their officers informed of the critical nature of this situation. The Board on Agriculture and the Environmental Studies Board of the National Research Council should also be informed in an effort to stimulate policy studies on the decrease in research support as well as on the potential benefits of expansion of basic and applied research in forest pathology. Suggestions on possible approaches to improve the present situation should be made to APS officers and members of the Forest Pathology Committee by interested members of our Society. The current decline of support in this field can be reversed only if influential scientists and public officials and administrators become adequately informed of the losses that will occur if corrective action is not taken soon.