

PUBLIC HEALTH

Ragweed Here to Stay

Eradication programs called failure. Research for more basic attack on hay fever needed. Immunizing shots best present treatment.

By JANE STAFFORD

➤ RAGWEED, the No. 1 enemy to millions and millions of hay fever sufferers, is here to stay.

The sneezing, sniffing, miserable victims of allergy to this plant's pollen might just as well reconcile themselves to that fact. Instead of working for ragweed eradication, they would do better to go to their doctors for the relief that can be given by immunizing shots.

The money spent on futile ragweed eradication programs would be better spent on basic research to find better treatment for hay fever and other allergies.

Ragweed, of course, could be eradicated. Modern herbicides, or weed-killing chemicals, could eradicate all the ragweed growing in the United States.

To do this, however, the eradication program would have to be nation-wide not just community or state wide.

The cost each year would be only a little more than the national debt.

The treatment with herbicides, or weed killers, would have to be repeated every year for 40 years, at the same annual cost. The reason for this is that ragweed seeds can live in the soil for 40 years.

At the end of the 40-year, staggeringly expensive program, ragweed would probably be eradicated from our land. So also, would all our food plants and perhaps even our trees.

Eradication Chances Low

This grim picture of the chances for success in beating hay fever by eradicating the ragweed plant cause comes from the American Foundation for Allergic Diseases in New York.

The hundreds of thousands of dollars currently spent each year by cities, towns and villages for ragweed eradication "might just as well be thrown down the drain for all the good it will do hay fever victims," Foundation authorities state.

New York City has carried on a nine-year fight to eradicate ragweed. More than 29,000 man-days of labor and \$750,000 of public funds have been spent. The program is believed the most ambitious ever attempted. But pollen counts in New York now are just as high as ever, Foundation authorities find.

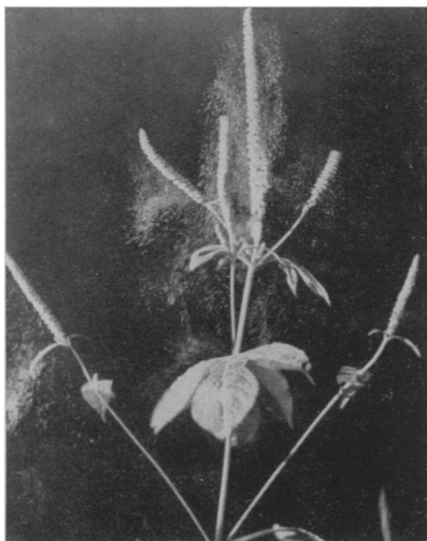
The reason is that at least half of New York City's ragweed pollen is generated outside the city and blown in on the wind.

One of the Foundation's scientists has

been making pollen counts for two years at a lightship off the New Jersey coast. The Atlantic Ocean area around this lightship is the same as the land area of greater New York. Pollen counts at the lightship station, the scientist finds, are as high as and sometimes higher than in New York.

The lightship study points up one of the big problems in trying to prevent hay fever by avoiding ragweed. The small light pollen grains can be blown great distances.

Ragweed, moreover, is found almost everywhere. Our modern weed killing chemicals are no match for the "thor-



ARCH-VILLAIN. From most hay-fever sufferers, this picture would get star billing in a rogue's gallery. The ragweed pollen causes their sneezing and other misery at this season.

oughly weed-saturated land in the urban, suburban and rural areas of our country," a Foundation statement concludes.

The only places where air contamination from ragweed pollen can be controlled are areas where the weeds are naturally absent or rare because soil and climate discourage their growth and where, in addition, there are natural barriers that prohibit the inflow of polluted air from adjacent weedy areas.

The barriers are broad, dense forests, deserts, and high mountain ranges. Prevailing winds from the ocean sometimes provide good one-sided protection. More often they do not, because high-floating clouds of pollen are often carried out to

sea and then blown back to the coast by onshore breezes.

The coastal region of Oregon and Washington, for example, had no ragweed until a few years ago. Some got in, presumably by accident, mixed with food plant seeds. Since the plant is not native to this coastal region, and since there are both ocean and high mountain barriers ragweed eradication would be practical there.

The same is true for southern Florida, where the plant is not native. Eradication would be practical.

Havens for Ragweed Victims

If you think about the barriers, you know one reason why certain regions of the country have long been havens for ragweed hay fever victims. These regions where the ragweed does not grow and little or no pollen can get across the barriers are the central Adirondacks, the extreme southern tip of Florida, the wooded areas of Maine, New Hampshire, northern Minnesota, extreme northern Michigan, the regions west of the Cascade Mountains in Oregon and Washington, and to some extent the desert regions and the forests of the Rocky Mountain and inter-mountain states.

Ragweed eradication is considered impractical but the allergy foundation offers this suggestion for individuals: If you suffer from ragweed-caused hay fever and have ragweed in your backyard, by all means pull it up. You will be helped somewhat, but your neighbor two doors or one block away will not, if he also is a ragweed hay fever victim.

Not nearly enough is known about hay fever and other allergic diseases that afflict more than 17,000,000 Americans. Less than \$250,000 has been spent in basic research on this problem in the last five years, the American Foundation for Allergic Diseases points out.

More needs to be known about the basic causes of hypersensitivity. With such knowledge, better methods of prevention and treatment might be worked out. Foundation officials hope to get from the public \$1,500,000 to finance search for this knowledge.

Meanwhile, for the hay fever sufferer this season, shots to desensitize, or immunize, him against the pollens are the best that can be offered. The shots can be taken now, during the season, and will give some help, though best results come from those given before the season starts.

Material for these shots has been improved in recent years, and there are chemicals in nose drops and pills that give temporary relief. These, however, should be taken with the advice of the doctor. Some help one sufferer but not another, and dosage, also, should be individually prescribed.

Science News Letter, August 13, 1955