Text: rubber shortage ranks as one of America’s major headaches during this war. The Japanese capture of Dutch and British possessions in the Far East, from which the United States imported large quantities of rubber before the war, has caused untold millions of dollars to be spent in the United States for developing synthetic rubber for mass production.

Malaria is a menace second only to the enemy in the Pacific theater. An effective medicine against the strength-robbing disease, stopped coming to America early in the war. Atabrine, used as a substitute, is adequate, but not entirely satisfactory. Recently, the formula for synthetic quinine was discovered, but the precious drug will not be produced in large quantities for some time.

Dr. Arthur C. Shead, associate professor of chemistry at the University of Oklahoma, feels great American plight in regard to most raw material shortages comes from neglecting opportunities for domestic cultivation of useful plants. He points out that rubber trees could have been, and can be, grown quite easily in the Caribbean area. If the situation became desperate, rubber could be obtained from common prairie “weeds” such as goldenrod, grayule, milkweed and Colorado rubber weed.

Cinchona trees (the source of quinine) could be grown within the United States sphere of influence also. There are approximately three million potential malaria cases in this country who buy medicine virtually controlled by another nation. There will be many more of these people after the war.

Dr. Shead believes that the United States, in failing to establish great plant industries like those developed in the Dutch East Indies and the Malay Peninsula, has ignored natural botanical products which could be put to good use with little outlay and provide employment as well.

One of the main reasons for this neglect is that American chemists formerly looked more or less toward Germany for leadership. Germany, he says, a land with few raw materials, specialized in synthetics and substitutes. Our scientists did likewise and overlooked our natural resources, especially plants.

To overcome this handicap, he urges the establishment of industrial botanical gardens. Almost every English borough boasts an asset, yet America has none worth mentioning. These gardens would investigate and develop the commercial uses of native vegetation.

Having no individual botanical garden to work with, Dr. Shead has organized a file of hundreds of plants that might be used for commercial purposes. Many of these plants grow in Oklahoma and the southwest. Oklahoma, being on the crossroads of four great regions, has a fusion of flora. Its plant products, unlike the mineral resources, have been neglected in the past, to such a degree that they constitute a tremendous field for exploitation. A timely feature of a large number of these proposed botanical industries is that they present opportunities for one-man businesses, attractive to returning servicemen.

Rubber, sugar, camphor, gums and dyes are among the items that can be secured from the scrubby trees and off-farmed weeds of Oklahoma’s sand hills and gullies, in Dr. Shead’s opinion. Many of these plants have by-products which make the entire plant commercially profitable. He believes that nothing could be more economical than recovering the wastelands and at the same time obtaining valuable, salable commodities.