



farthest, 251,300 miles away. **Friday, July 18**, 8:14 p.m., Moon passes Saturn. **Sunday, July 20**, 4:13 a.m., Moon passes Jupiter. **Tuesday, July 22**, 11:07 a.m., Moon passes Mercury. **Thursday, July 24**, 2:39 a.m., New moon. **Saturday, July 26**, 8:04 a.m.,

Moon passes Venus. **Monday, July 28**, Early a.m., Delta Aquarid meteor shower. **Thursday, July 31**, 4:19 a.m., Moon in first quarter.

Eastern standard time throughout.

AGRICULTURE—CHEMISTRY

More Tung Oil Production Needed in United States

Imports from China Supply Only Twelfth of Demand And Present Domestic Production Hardly Two Per Cent

RAPID increase in tung tree acreage in this country is urgently needed, W. M. Smith, Jr., technical adviser of the Reasor Tung Plantations, Inc., told the First Annual Southern Chemurgic Conference meeting in Nashville.

The normal annual requirements for tung oil in the United States amount to at least 150 million pounds, and the present imports from China, almost the only source, are supplying only a twelfth of that. Despite the extensive plantings that have been made in this country, present domestic production takes care of hardly 2% of our needs.

Tung trees, which are somewhat sensitive to frost, grow well only in a belt about 100 miles wide along the Gulf Coast, and across Florida to the Atlantic. Fortunately, they require an acid soil, which makes available for tung plantations vast stretches of land that are of little use for other crops. They require plenty of water (40 inches annual rainfall), yet they will not grow in wet soil. Tung planting is not a job for hit-or-miss amateur methods, Mr. Smith emphasized; it requires careful scientific investigation of ecological conditions before

the trees are set out, if the venture is to be a success.

Science News Letter, June 28, 1941

Farm Wealth in Weeds

FARMERS of the future may win wealth from wild plants that are now regarded only as weeds, Wheeler McMillen, president of the National Farm Chemurgic Conference, suggested to the Chemurgic Conference.

Reminding his hearers that there are about 250,000 known species of plants in the world, of which approximately 15,000 are native to the United States, the speaker called attention to the fact that the ones under cultivation number only a few scores, and those are mainly the same as our prehistoric ancestors chose because they could be used just as nature produced them. In modern times great changes have been made in cultivated plants by scientific breeding, yet we have not thought to pick up hitherto uncultivated plants and develop their good qualities in the same way. He urged the appropriation of funds for research in this direction, to

be conducted at state experiment stations.

Science News Letter, June 28, 1941

Farm to Forest

FELLING forests to create new farms, traditional practice in America since earliest times, isn't always the right thing to do, Dr. J. Alfred Hall of the U. S. Forest Service declared. Rather, the process should be reversed on much land which is now being unprofitably plowed year after year, with the farmers only sinking themselves and their families deeper and deeper into poverty.

Dr. Hall took the states of Tennessee and Kentucky as examples for his thesis. When the first settlers came, both states were practically continuous forest. The newcomers ravaged the woods with fire and ax, with no thought for the timber values but only for the soil they could plow and plant after the trees had been cleared.

The result, he said, is that in both states the cut of high-grade lumber is diminishing, with the proportion of lower grade lumber increasing. Men who used to have jobs in sawmills and other wood-using industries have been thrown out of work. Where oak, hickory, chestnut and gumwood used to be a source of pride as well as revenue, there is now a shortage so severe that hardwood lumber is even having to be brought in from the outside.

Science News Letter, June 28, 1941

RESOURCES

Fireworks for Defense Aids Safe and Sane Fourth

DEENSE production will tend to make this year's celebration of the Fourth of July more "safe and sane" than ever!

With the need for military fireworks, most manufacturing companies are loaded with government contracts. One large maker, producing big display pieces, reports that output for civilian use is now only a third of last year's while that for the Army and Navy has increased three-fold.

Another manufacturer, who makes the big three-inch firecrackers, or "salutes," says that their civil production thus far is only about a third off last year's, but it is falling rapidly, to enable them to take on more government orders. Thus, the 1942 Fourth of July may be almost completely fireworkless.

Magnesium and aluminum, the two