

CHEMISTRY-AAAS

New Rat Poison Potent

Castrix is reported to be five times more effective than ANTU and 1080. It is also poisonous to dogs, cats and other animals.

► CASTRIX, a poison even rougher on rats than the recently announced ANTU and 1080, made its bow at the meeting. Prof. Kenneth P. DuBois who gave out the bad news for rodents, developed the compound from a German formula in the University of Chicago's Toxicity Laboratory on a project sponsored by the U. S. Chemical Corps.

Castrix, he said, is at least five times more effective than ANTU and 1080, is readily accepted in rat baits, and does not produce a tolerance if it fails to kill the first time. It produces violent convulsions, which end in death in less than an hour.

Like 1080, it is poisonous to dogs, cats and other animals; but it has effective antidotes in the barbiturates, already widely used in human medicine as sleep-inducing drugs. An animal given 20 times the ordinary lethal dose would recover after the administration of a barbiturate, even though convulsions had set in. Castrix is thus the only highly toxic rat poison that has an effective antidote.

2,4-D Injures Cotton

► COTTON seems to be one of the most sensitive of all plants to the weed-killing chemical 2,4-D, so when 2,4-D was dusted on water hyacinth and rice-field weeds in Louisiana last summer some sensational damage was done to neighboring cotton fields by dust that drifted to where it had no business to be.

Among the symptoms of 2,4-D injury described by Prof. Clair A. Brown of Louisiana State University, were leaves with abnormally long points and ruffled margins, malformed flowers with dwarfed petals grown together, and worst of all a premature dropping of buds and flowers with corresponding reduction in yield. Losses of as much as 60% of the crop were reported.

Elm Disease Remedy

► TREATMENT for elm trees afflicted with the fungus blight that has been improperly christened the Dutch elm disease may be at hand. Dr. Albert E.

Dimond of the Connecticut Experiment Station told of watering the ground around half of a grove of 200 purposely infected elms with a solution of oxyquinoline benzoate, leaving other trees supplied with water only as controls. After three weeks, 47 of the untreated trees showed marked symptoms of the disease, while only 29 of the treated trees were visibly sick.

Don't Go to Ant

► THE world's most completely socialized beings—bees, ants and termites—do not afford models which man will ever be able to follow, even if he should want to, Prof. Ernest N. Cory of the University of Maryland declared at the meeting. Prof. Cory spoke as retiring president of the American Association of Economic Entomologists, an affiliated organization.

These insects, which have developed highly efficient, almost frictionless communities through ages of evolution, have done so only at the expense of eliminating practically everything that makes human beings human, the speaker pointed out. There is no such thing as individual initiative, not even much that could be recognized as individual wish or impulse. Any given insect's position in the colony, as well as its work and its whole life activity, is predetermined literally in the cradle.

Insects on Bikini

► INSECTS on the islands of Bikini atoll seem to be calmly unconscious that there ever were such things as atom bombs. It seems more likely that if any disturbance in the natural insect population of the area took place it came as a result of a mass DDT-ing of the islands before the tests, to abate the plague of flies.

Dr. A. C. Cole, Jr., of the University of Tennessee, who participated in the scientific resurvey of the islands last summer, regretted that no insect survey had been made prior to the dousing of the area with DDT, because now it is impossible to obtain any basis for comparison.

Phosphate Gardens

► PEBBLE PHOSPHATE rock from Florida, and crushed phosphate rock with the natural fluorine removed were two of the "gravel" varieties used in experiments on soilless cultivation of hot-house flowers conducted by Dr. Neil W. Stuart of the U. S. Department of Agriculture at the plant industry station at Beltsville, Md. This phosphate-rock "gravel" supplied all the phosphorus the plants needed for thrifty growth, Dr. Stuart reported.

Science News Letter, January 3, 1948

ASTRONOMY

Meteors Spotted by Radar Better Than Visually

► "SHOOTING STARS" are "seen" three times as often as radar echoes as they are spotted visually in the sky, if the experience of a group of Canadian astronomers is typical.

On five consecutive nights last August, when the shower of "falling stars" that each year seems to radiate from a point in the constellation of Perseus was at its height, meteors actually seen and those appearing on the radar scope were counted. A total of 3,700 radar echoes and only 1,100 visual meteors were recorded, during this, the year's best shower, Dr. Peter M. Millman of the Dominion Observatory, Ottawa, stated at the meeting of the American Astronomical Society at Columbus, Ohio.

Over 100 radar echoes lasting five seconds or longer coincided with the appearance of the brighter Perseid meteors—those as bright as the brightest stars in the sky. Not more than three of these could have coincided by chance, Dr. Millman estimates. But for 54 more of these brightest meteors there was no echo at all on the radar scope. This lack of a radar echo is puzzling.

Radar echoes lasting less than five seconds were 12 times as numerous as those of longer duration. For these, not enough "falling stars" were seen in the sky at the same time for any connection between the two to be considered.

Science News Letter, January 3, 1948

Great quantities of *synthetic rubber* will be used in the future, it is expected; alloyed with certain plastics they form a tough, resilient floor tile which is unaffected by oils and grease.

Attachment cords for kitchen electrical appliances should be kept free of grease or the rubber insulation may rot.