



Underground Enemies

➤ GARDENING OPERATIONS are apt to turn up numbers of the fat white larvae commonly known as grub-worms, and once in a while a big brown beetle, its shell still moist and soft.

It is natural to find them together, for the grub-worms are the larvae, or infants, of the beetles.

In ancient Egypt, these beetles would have been treated with the utmost respect, for they belong to the same general entomological cousinship as the scarab, which was a sun symbol.

Most widely distributed are the ones known sometimes as May-beetles, sometimes as June-bugs, depending on the month in which they become most numerous above ground in your neighborhood. These are found all over the country, except in the more arid regions.

In a large and regrettably growing section of the Northeast, the pattern is repeated on a smaller scale—about one-fourth the May-beetle size—by a more recently introduced pest, the Japanese beetle. The two insects are fairly closely related, though their native homes are far apart.

Whenever your spade turns up either grub-worms or beetles, be sure to destroy them. If you keep chickens, they will welcome such tidbits eagerly. The grub-worms also make good fish bait—if your mind tends to stray from the sober business of

gardening. But even if you can't put them to any practical use, kill them anyway. Crush them with your spade, or drop them into a tin of kerosene.

If you live in Jap-beetle country, you do not need to be told why you should massacre all such insects you turn up. You have seen what havoc the swarms of adults can work on anything green and edible. The larvae underground duplicate on the roots of plants what the adults do to the tops.

The bigger white grubs are even more destructive underground feeders than the Japanese beetle larvae, for their appetites are correspondingly larger and they are just as omnivorous. They will gnaw into the hearts of potatoes or carrots or other root crops; and what a lot of grub-worms can do to a strawberry bed cannot be adequately discussed in print.

These underground enemies show no mercy to your garden, and you should give them no quarter.

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TECHNOLOGY

Two-a-Day Merger Rate

➤ AMERICAN INDUSTRY has diversified its activities in the post-war years, a survey by Arthur D. Little, Inc., Cambridge, Mass., shows.

Many companies have gotten into some other business by merging with other companies. Such mergers, mostly seeking product or market diversification, have been proceeding at the rate of two a day for the past seven years.

Instead of seeking to control markets as was the case in many earlier business combinations, the present trend of diversification increases competition, the survey points out. Getting into some other line of business along with the older activity avoids a narrow market and the sharp swings in demand of only a single field.

A leading producer of railroad air-brake systems formerly relied entirely on the notoriously undependable demand of the nation's railroads. It recently purchased another company making road-building machinery and industrial engines. Other railway-equipment companies now manufacture aircraft equipment, electronic devices, oil-field pumping equipment, jet engine parts, vacuum pumps, farm-machinery castings, heat exchangers and plastics. One such company, formerly selling six related products to one industry, now makes 28 products for nine industries, and has reduced its dependence on the original market by 40%.

The fact that people live longer and that there are larger annual baby crops has caused some companies to go into these new markets.

More leisure time for the consumer, resulting from the shorter work week, paid vacations and faster transportation, creates

CHEMISTRY

Blue Dye Shows When Egg in Noodles

➤ HOW MUCH egg in noodles, if any? A blue dye can tell.

The U. S. Army's Quartermaster Subsistence Testing Laboratory, Chicago, grinds up samples of the noodles it buys for feeding the fighting forces, adds the dye and then determines the depth of the blueness by a colorimeter. Because eggs have a fatty, phosphorus-containing product which is stained by the dye, the bluer the noodles, the more egg.

Egg noodles have to contain 5.5% egg yolk solids to meet Army specifications. The new blueness test is not yet official, but is used for screening purposes.

The new test is reported to the *Journal of Agricultural and Food Chemistry* (July 22) by John E. DesPaul, Albert Weinstock and Charles H. Coleman.

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many new consumer demands. The shift to suburban and semi-rural living areas makes new markets for garden-type furniture, home-workshop tools and a host of other products for the home.

"Markets for industrial products are also changing because of increased complexity of manufacturing operations, greater use of new materials, and greater technological obsolescence," the survey finds. "The rise of the petrochemical industry, the substitution of plastics for metals, the trend to automation, and the broad field of atomic energy suggest new opportunities to many established companies, although a high degree of scientific competence is required to enter these and similar fields."

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To combat *counterfeiting* of money orders, new fluorescent inks are being used on certain parts of the official blanks; when exposed to ultraviolet light, the inks glow brightly.

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