

ORGANIC GARDENING

BETTER BEETS

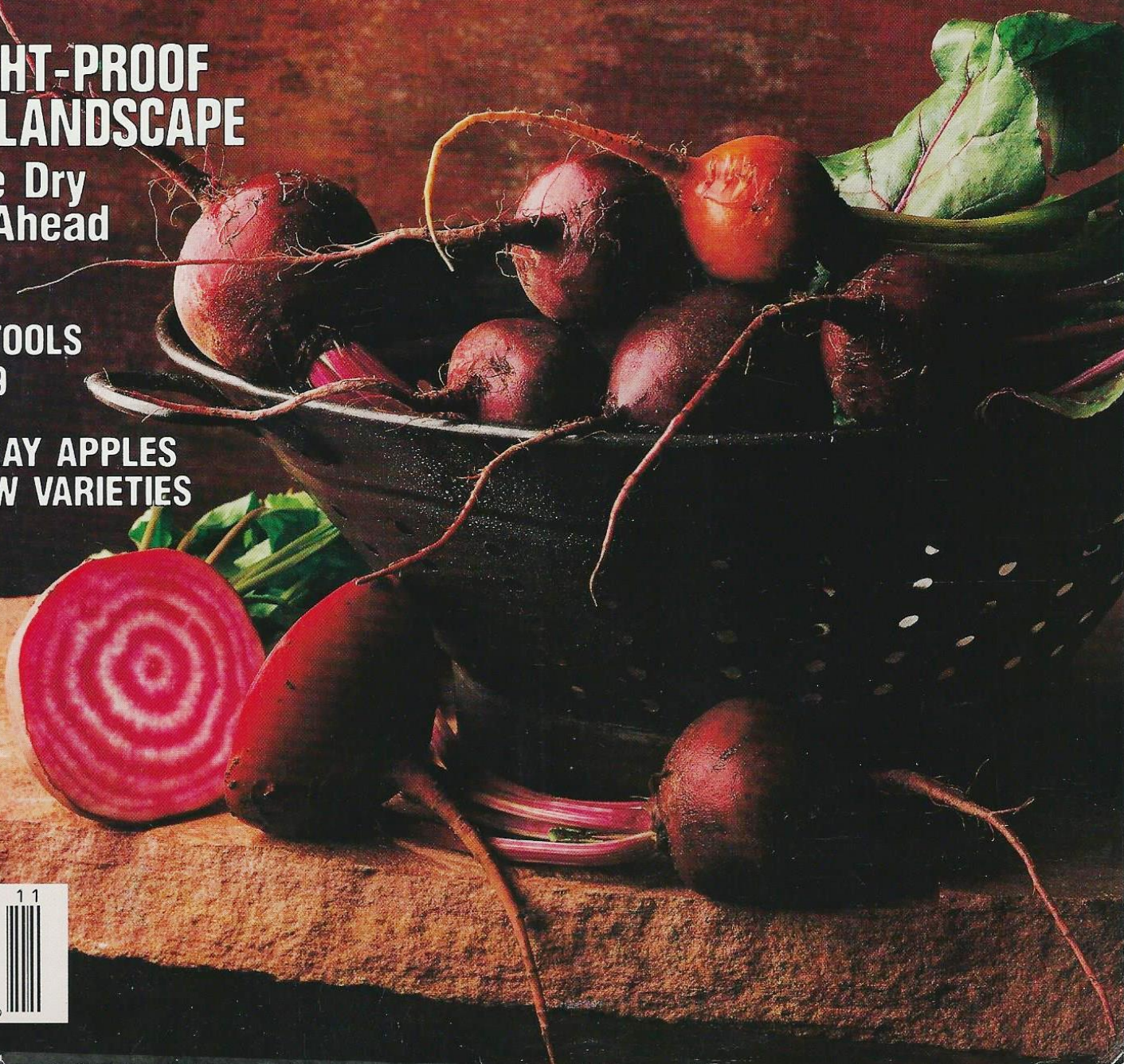
Higher Yields, Sweeter Taste

DROUGHT-PROOF YOUR LANDSCAPE

For The Dry
Times Ahead

TOP 20
POWER TOOLS
FOR 1989

LOW-SPRAY APPLES
BEST NEW VARIETIES



NEW GROUND

ANOTHER GREEN REVOLUTION?

A lowly fungus that feeds nutrients to plants in poor soils could spark a second green revolution, reducing dependence on fertilizers worldwide while boosting plant yields, predicts a University of Delaware plant physiologist. With the aid of mycorrhizae fungi, which live symbiotically with plant roots, Dr. Carol Janerette envisions reclaiming the barren soils of East Africa, reestablishing forests in strip-mined regions and growing super-size trees and food crops.

The fungi dramatically in-



crease the growth rate and yield of herbaceous and woody plants by transporting water and nutrients to roots from deep within the soil. In exchange, plants provide mycorrhizae with shelter and energy.

Janerette now has a patent pending on a process that stimulates the naturally occurring fungi to reproduce on demand—the first step toward their mass production for commercial use. As early as some time next decade, she foresees farmers and gardeners applying a fungi-laden inoculum like plant food to revitalize spent soils.



SAVE THE FARM

Can the last farm in urban San Francisco possibly survive? Contrary to some developers' desires, members of the San Francisco League of Urban Gardeners (SLUG) are doing everything they can to keep the Demattei family farm producing. Located in the Bayview area, the 3-acre farm has been cultivated by the Dematteis since the early 1900s. But earlier this year the family sold one acre to a developer, while continuing to oversee migrant farming of greens and herbs on the other two acres. One acre lies above a railroad tunnel owned by the Southern Pacific Transportation Co.; the other is undeveloped city land.

The developer hoped to build upscale housing on the acquired acre, but city

officials tabled that plan by limiting development to low-cost senior citizen housing. Meanwhile, SLUG, a non-profit group founded in 1983 to promote organic gardening in the city, acquired a lease to farm half of the railroad-owned acre and hopes to obtain farming rights on at least half of the city acre soon.

To the delight of many local residents, SLUG plans to use private grants to establish an organic demonstration garden for public schools and neighborhood use, says Jay Kilbourn, the group's executive director. Produce would be donated to the San Francisco Food Bank. For more information on the group's educational programs, write to SLUG, 2540 Newhall St., San Francisco, CA 94124.

NATURE'S WAY

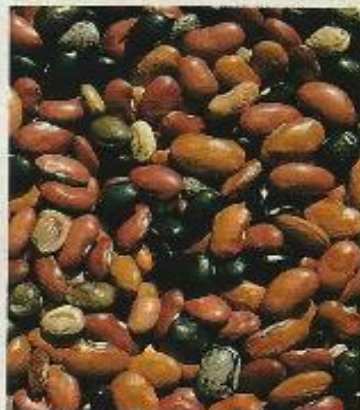
We did not weave the web of life, we are merely strands in it. Whatever we do to the web, we do to ourselves.

Chief Seattle
1851

CAPTAN ALTERNATIVE

A new biological seed treatment may soon replace the chemical captan used to protect seeds from fungus during germination. Although captan does not cause a problem in the soil, it can cause reactions if it gets on your skin or in your eyes. The new treatment tested recently at Cornell University in Ithaca, N.Y., is based on strains of *Trichoderma* fungus. The new "bioprotectant" forms a fungal barrier around germinating sweet corn, cucumber, pea, bean and other commonly treated seeds, protecting them from soilborne pathogens.

"We're sending good fungus after bad fungus in an



ecological and economic way," says John Williams, Cornell's director of communication services. Besides protecting seeds from fungal diseases like damping-off, the treatment also guards plants' root systems and enhances growth.

The Eastman Kodak Co. funded the most recent Cornell trials and maintains exclusive marketing rights for the fungus, which it expects to market after an EPA review of the trial data in about three years.