

ON CHEMICAL CO.
14141 Atlantic Ave., South Gate, Calif.

APPROVED BY
MADE IN THE U.S.A.

**I'M HERE TO TELL
— I SURE DO SELL
Peco Peto MULCH**
Now made in 2 1/2 gal. size

THE NATIONALLY ADVERTISED PECO COMPANY

Thanks to aggressive merchandising and aggressive advertising in leading national magazines and newspapers, PECO Peto Mulch is the most widely sold bulk-type, unencased water-retentive soil conditioner in the U.S. To the home gardener, PECO Peto Mulch is the growing conditioner that improves soil, holds water, keeps weeds down, and keeps plants healthy. It's the best fertilizer and soil builder. Test First! Get 20¢ off one gallon of PECO Peto Mulch. The "Big" word of gardening revolution.

A Free Distributable Literature

The Pacific Lumber Company
230 BROAD STREET
COLUMBIA NEW YORK SAN FRANCISCO, CALIF.
LOS ANGELES, CALIF.

BLACK STUFF
(FINE TOBACCO POWDER)
USED BY FLORISTS FOR MORE THAN 40 YEARS

**\$3.00 FOR
100 LB BAG**

H. A. STOOHOFF CO.
YORK, PENNA.

[illegible]

SELL YOUR ROSES, PERENNIALS, SHRUBS, VINES AND FRUIT TREES

STARTED & GROWING

GLOMEX POTTS

PERENNIAL PLANTS

Figure 3. New container offerings entered the market in the 1930s and '40s

GLOMEX FLOWER FARM

GROWER OF PERENNIALS, SHRUBS & TREES



plants that
get in
0s.

AZALEA SHINOBU
A Fall Sample of our Spring Line.

PLANT

Suitable for Potting
Parentals and
for Late Planting
Larger Seedlings

Top Diameter 2 1/2 in.
Base Diameter 2 1/2 in.
Height 3 1/2 in.

Remove Plant
Unhindered

JUST POTTED

It fits
in 12 months
1/2 in. of ground

ready for Shading

ROOTS THRU - POT

DULEYARD NURSERIES

POT

Roses, Shrubs, Bulbs,
Many Other Plants in
Full Flower.
See them.

Full 100's \$ 6.00
Full 100's \$35.00
Planted 100 and
1000 year centers

Weight 22 lbs.
over 100 lbs.

SHOULDER PLANTING
in the ground

When planting come
over top of ground
leave a little bit above
ground each year

PLANT POTS IN GROUND

NEWPORT, R. I.



JUNE 1, 1940
29

Those Wooden Plant Bands

Try these this summer. You can, locally sponsored, place one wooden band on every plant in the fall. They'll be around all year since they are covered in wax.

Write for standard and prices.

Send for circular describing full size

Will Be Found Of Particular Interest to the Progressive Nurseryman

Gryg Ball
...
not export
...
"These Bands for Nurseries"



ATTENTION NURSERYMEN!

The New Tapered Crimped Metal Pot THE INDUSTRY NEEDS . . .

- 1. Remove the plant WITHOUT cutting pot . . . reuse it.
- 2. The taper permits the stacking of pots . . . saves space and time.
- 3. No rough edges . . . therefore no serious hand or finger cuts.
- 4. Sanitary . . . no sticky fruit residue . . . won't attract vermin.
- 5. Attractive Green or Black Colors.

Alert Nurserymen Are Discarding the Old, Dirty, Sticky, Used Can . . .

IT ALL ADDS UP TO EFFICIENCY . . . LOWERED COSTS . . . INCREASED SALES . . . BIGGER PROFITS



Colors of Green or Black

side note, fire hoses were developed much earlier and were originally made from animal intestines!)

Early media sources

Historically, growers who used locally available soils (e.g., loam) often supplemented them with organic media to grow crops, sometimes in containers. However, soils were heavy, required sterilization, and were often scarce and unpredictable. One grower's comment from an interview with *GrowerTalks* may best describe the evolving challenges of using soil in media: "Ten years ago, you went out to the 'north forty,' dug up enough soil to pot your plants and that was it. Now, you may find the soil has been treated with atrazine last summer and you lost 20,000 flats of bedding plants, or you may find the north forty is now a subdivision—and you really have no place to go for soil."

Plant production in the 1940s was heavily impacted by World War II, leading to supply shortages, fuel and raw material rationing, among other disruptions. When the channels of trade were closed to the importation of peat moss at points during the war, there was an increase in domestically produced peat (and other materials). Over a dozen peat companies were selling peat during this decade (Figure 1)—a trend which would only increase over time.

In 1945, the U.S. Air Force built one of the first hydroponic farms on Ascension Island, using crushed volcanic rock as a growing medium to ensure food supplies for personnel in remote locations. (This proves that "substrate security is food/

national security", a concept equally true in 2026.)

Vermiculite made its debut as a propagation media around 1946 under the trade name Terra-Lite (Figure 2) and the decade ended with the construction of the first phytotron in the U.S. (Caltech) in 1949, setting the stage for a generation of controlled environment plant research.

The first containers

The evolution in soilless growing media cannot be discussed without mentioning the simultaneous development of containers. From the Colonial Days, container options for plant growers were limited to various clay, earthen, wooden and paper pots (i.e. Bird's Flowerpots, 1920s). Through the Civil War era, clay/earthen pots were made with hand or foot-powered wheels, which greatly limited production volume. Up to WW II most bedding plants were grown in boxes or flats where they were dug up/out and wrapped in paper for customers. Then came the veneer plant band (Spruce bands)—an idea that George Ball worked out with an Oregon veneer maker (Figure 3) to produce wood-panel “cartons” for producing young plants.

Soon after came the industry-changing Jiffy pot, cardboard cartons (Monrovia Nursery Co.), Cloverset pots, peat pots, roots-thru pots (the first plantable container) and Gray's zippered pot, among others. Around the same time came the advent of the "pony pack"—the first pots developed (by Carl Tasche) that "stuck together," even if poorly, allowing growers to sell plants individually. Containers

"gave plant's feet," and once that mobility was provided, the horticulture industry changed forever.

By the 1940s, some nurseries began growing plants in metal cans, which may sound familiar, as many growers today still use the term "can" interchangeably with "container." Product development during this decade also included "can cutters" or "splicers," which were needed to extract plants from the containers (Figure 2). Products were also developed to increase the stability of burlap used on B&B plants to prevent crumbing rootballs, and unique products like "Black Stuff," a pulverized tobacco dust used as an insecticide by many growers.

Mark Twain once said, "History doesn't repeat itself, but it does rhyme." How much can the history of our industry benefit us now as we move forward in research and innovation? Today, we often see "new" substrate materials, plant products, planting techniques and ideas marketed as novel or innovative, when in fact, in some cases, we're recycling past works and ideas that we didn't know already existed.

The intent of this series is to shed some light on where we've been so that we may know better where we're going (you're welcome, granddad), while pausing to celebrate the remarkable achievements that have brought us to where we are today as an industry. ■

Brian E. Jackson is a Professor and Director of the Horticultural Substrates Laboratory at NC State University. Brian can be reached at Brian_Jackson@ncsu.edu.