



THE GARDEN DOCTOR

SPRING 1995 ©

SPRING ISSUE- 1995
INDEX:



Osprey, nest and young.

"The only normal people are the ones you don't know very well."
Joe Ancis

"Old age is like climbing a mountain. The higher you get the more tired and breathless you become. But your view becomes much more extensive." Ingmar Bergman

1. INDEX
2. EDITORIAL
3. GOOD NEWS
4. REVOLUTIONARY FRUITS
5. HIDING OUR TRUTH
6. HERBS FOR MEN
7. HERBS FOR WOMEN
8. RADICAL PLANTS
9. RESOURCES
10. HYPERTUFA
11. SHARING SECRETS
12. ATTRACTING BIRDS
13. BAD NEWS
14. THE GARDEN
15. SELF-STUDY GUIDE
16. SELF-STUDY GUIDE
17. MY SEEDS!
18. READERS DIGESTED
19. POETRY
20. PHUKINAY!
21. PRUNING FLOWERING SHRUBS
22. HEDGE ROSES
23. HEDGE ROSES
24. DIARY
25. WISDOM OF THE BODY
26. OWN-ROOT ROSES
27. VOWEL MOVEMENTS
28. TWIN LEEKS
29. BUCKBEAN
30. ZESTY PESTICIDE RESIDUES!



Perhaps one reason that gardening is such a defining element in my life, and in many of your lives, is that the rhythms and beginnings and little deaths we notice in our gardens so clearly mirror those in our lives and hearts. Plus, successful living AND gardening requires hard work, constant observation and learning, along with inner resiliency and adaptability. And both offer us daily the chance to create something new and beautiful within us and around us. Quite a fair arrangement, it seems to me.

For some of us, our lives are shaped intimately and principally by gardening. My friend Sandy Cruz has fashioned her home and property and life up in the mountains in Ward, Colorado around the principles of permaculture. My good friend Jeff Peltz bought his first house, after years of serious vegetable and flower gardening at rentals, just so he could finally have a yard to call his own, to steadily improve in fertility, productivity, and botanical diversity. Dervilla Gowan, one of this publication's most ardent readers and supporters, has centered her current life phase around the culture, protection, promotion and distribution of trees as her contribution to planetary healing. I moved to Denver from Tampa, Florida in the fall of 1987 so that I could, at last, grow cold hardy perennials, plus to have the experience of gardening in heavy, alkaline clay soil after years of Tampa's light, highly-acidic sand. I've told a few friends that I chuckled this last winter upon remembering that in early 1987, while trying to think of sound reasons to NOT leave my secure, safe life in warm, familiar Tampa for the uncertainty of starting this publication in cold, scary Colorado, I considered, briefly, staying put so as to try to cross Tampa's infamous, indestructible, pink, mystery "Cracker Rose" with the moderately fragrant and disease-resistant modern semi-climber "Don Juan", not because I loved roses (which I didn't yet...hard to fathom now!) but because as an organic Florida landscaper I realized the desperate need for reliable heat-and-humidity resistant roses for my customers' gardens. But my knowledge of, and interest in, hybridizing was minimal, and the thought illicit little of the passion that I held for starting this publication in a whole new climatic and geographical zone. So I sold my funky little 8-wide trailer and moved here, scared but excited, knowing I was creating a fertile episode of life changes. So I chuckle now, 8 years later at realizing that I have become a very focused and dedicated rose hybridizer working to create fragrant, disease-resistant roses for Florida! I for months now have been surprised to find myself considering moving back to Tampa in 1997 to speed up progress on my work, or perhaps to resume migrating there each autumn for the same reason. It will be true full-circle justice if gardening in Colorado results in my becoming a Tampa-based rose hybridizer! Life, it seems, is a series of surprises, many of them sprung on us by our own unfolding hearts.

I feel that we who love to garden, especially organically, are blessed in that we are immersed in a way of life (and thinking) that is inherently and broadly optimistic...we create the potential for, and EXPECT, growth. Planning another year's gardens, nourishing our soil, rescuing heirloom plants from extinction, all the while refusing to purchase or use artificial pesticides, we are focused on creating a positive future, both immediate and long term, not only for ourselves and our loved ones, but for those many souls to come as the centuries roll along after us. What's neat is that these "noble" outcomes are simply additional harvests as we "selfishly" cultivate the barrenness around us and within us into something beautiful in an ongoing celebration of growth as its own end and reward. The human heart truly IS a garden.

John

GOOD

NEWS

More than half the world cooks with biomass fuels like dried dung, crop wastes or wood, all of which release pollutant-laden smoke which causes widespread respiratory disease in rural children and women. But Eugene B. Shultz, Jr. of Washington University in St. Louis has found that the dried roots of wild melons and gourds ignite easily, burn slowly and release very little smoke. Shultz had happened on some dried roots of "Caulabacilla loca" from New Mexico and tried them in his home fireplace, there noticing the high quality of their burn. The African species "Curcumis hirsutus" is indigenous throughout the southern half of that continent, and native women cooks testing it so preferred it to wood they asked for seeds! People in Mexico responded well to the dried roots of "Cucurbita foetidissima". All of these species grow well in hot, dry climates and bear seed-filled fruits in large numbers, making their spread throughout these regions quite easy. Their large sprawling vines might also be useful as living mulches to cool the soil normally baked by the desert sun, thereby improving yields of corn, fruit trees and other tall-growing crops.

SCIENCE NEWS 11-13-93

A pink yeast naturally found on most fruits, if applied to pears and apples, even those with abrasions, can completely prevent those fruits from molding in storage for up to 6 months, making it more effective than artificial fungicides.

Wojciech J. Janisiewicz, Dept. of Agriculture's Appalachian Fruit Research Station, Kearneysville, W. Virginia

MAY 1994 "PLANT DISEASE"

The amount of the fatty acid "Gammalinolenic acid" (GLA) (1.4 grams) found in about 3 capsules of borage seed oil, black currant seed oil, or evening primrose oil, taken daily in a placebo-controlled trial, reduced the swelling and pain of rheumatoid arthritis in nearly 50% of those in the study. Univ. of Pennsylvania, Univ. of Massachusetts



Michael R. Hoffman, a chemist at the California Institute of Technology at Pasadena has discovered that ultrasound can break down hazardous wastes in liquids into their nontoxic constituents. For example, when he subjected the deadly pesticide parathion to ultrasound at 20 kHz, delivering 75 watts of energy per square centimeter, the entire sample broke down in 2 hours, vs. the usual half-life of 108 DAYS! He says that the ultrasound generates tiny bubbles that, for a few microseconds as they collapse, create temperatures of 5,500 degrees centigrade, thus disintegrating the toxic complex molecules.

SCIENCE NEWS 1-7-95

DYSFUNCTIONAL FAMILY GARDENING TIPS !!



1. Give little Johnny and Meagan a "YOUR FIRST GARDEN!" seed and fertilizer kiddy kit for Christmas. On harvest day get drunk and scream at them because a few of the ears of corn are missing a few rows of kernels, insisting they could have done better, slapping them every time they cry out "But Daddy!!!"
2. When your husband and kids give you flowers on Mothers Day, pout and complain because they BOUGHT them at the florist instead of GROWING them, which they WOULD have done if they REALLY loved and appreciated you. Next Mothers Day, when they proudly give you a big homegrown bouquet, complain bitterly that the flowers "just aren't as nice as the ones I always see at the florist...don't you CARE enough about me to plan ahead and buy me some REAL flowers?". Then huff and pout all day.
3. Take your kids and spouse to the local nursery one sunny morning to pick out 4 packs of annuals and veggies for the family spring garden. No matter what anybody chooses, grab it out of their hand and put it back, angrily telling them "You KNOW that won't grow here" or "Don't be STUPID I HATE those and you KNOW it!" If the kids look like they are close to crying, slap them and make them wait in the car.



3

R

evolutionARY

FRUITS



by Che Guava

BLACK APRICOT (*Prunus dasycarpa*)- Cultivated originally in Afghanistan, Kashmir and China, this variety of apricot is as cold hardy as standard apple cultivars. The fruits are plum-like, almost black, and a little smaller than regular apricots. The tree not only is a little taller and more upright than the common apricot, its seeds come very true when planted.

TREE TOMATO (*Cyphomandra betacea*)- Related to the potato and tomato, this plant too is in the Solanaceae Family and also originates in South America, having long been cultivated by Peruvian Indians. This evergreen softwood tree or bush grows from 8-12 feet tall, and bears big soft green leaves on scraggly branches. Numerous fragrant purple-and-green flowers appear in spring, although the plant will flower (and thus bear fruit) continuously when conditions are ideal. These conditions are: low humidity, bright sunlight, temperatures no lower than 50 degrees, and a rich, composty-manure growing medium. The fruits are reddish-orange, 2"-3" long and 1½"-2" wide, and occur in clusters at terminal tips of new shoots. The pulp is light orange, sweeter than a tomato and speckled with black seeds. This pulp may be eaten raw or used in jams. Propagation is easy from seeds or cuttings. Prune the plant in April to keep it from getting overly scraggly.

JUNE BERRY, or SHAD BERRY (*Amelanchier* spp.)- Ranging from small shrubs to 40 foot tall trees, the 25 species of *Amelanchier* are native to the northern temperate zones in North America and Europe, where their juicy, berry-like fruits have long been relished. Like the pears and apples to which they are related, they are in the Rose Family, and subsequently their white or pink flowers have 5 petals. *Amelanchiers* will thrive in a wide variety of soil conditions, (including limey) will tolerate fluctuating moisture levels, and are very cold hardy. Ripening in June, the sweet juicy fruits are berry-like pomes (an apple is a large "pome") about the size of a garden pea, though some varieties' fruits are the size of a small crab-apple. The fruit ranges in color from dark red to purplish-blue to black, with the skin always covered with a "bloom" (bloom is the easy-to-wipe-off frosty bluish seen on Concord grapes). Native Americans crushed and dried Juneberries into a dense "cake" to eat on long expeditions, but they may also be eaten fresh out of hand, dried like raisins, baked in pies, or made into jams and wines. Propagation is by seed or root suckers. *Amelanchiers* are grown in Britain as ornamentals because of their delicate and very numerous flowers, plus their colorful leaves, which are coppery when young, then turning red or gold in the fall.

PONCIRUS TRIFOLIATA (Hardy Orange)- Native to central and southern China, this 6 foot tall deciduous shrub is now considered to be the sole member of its genus, although in the past botanists have classified it as "*Citrus trifoliata*" and "*Aegle sepiaria*". It has been used as a rootstock for *Citrus* species, as a hedge in southern Europe, and to create unique hybrids with various *Citrus* species. It grows best in full sun in any healthy fertile soil, and produces beautiful fragrant 2" white flowers in April and May. The 1"-2" fruits that follow are hard and contain little juice unless aged for 2 weeks after picking, at which point they yield about 20% juice. This juice is both bitter and sour due to high levels of acids and volatile oils. In China this pungent juice is used to make beverages and seasonings. The poncirus is cold hardy enough to grow and bear fruit outdoors in Britain. (Note: the hybrid of the poncirus and the sweet orange is the "Citrange" which can be grown in areas much colder than can the sweet orange. Its fruits are 1"-4" in diameter and very agreeably flavored.)



Amelanchier Canadensis,
Branch with mature leaves and fruits.
Flowering branch.

possible source of these and other unusual fruits: Oregon Exotica Nursery 1065 Messinger Road,
Grants Pass, Oregon 97527. Free catalog.
or: Northwoods Retail Nursery 27635 Oglesby Rd.
Canby, OR 97013 (503) 266-5432

4

Hiding Our Truth Behind Our Addictions

There was a time in my life when tear was a knee jerk reaction for me. It happened so fast, and so instinctively, that I never even felt it. A beautiful woman would enter the room, my date would glance at her, and I would simply reach for a drink. The more expert I became at hiding my feelings from others, the better I hid them from myself as well. In time, they became the fuel for my addictions and self-destructive habits. Through much personal work and self-examination, I have become aware of my fears and they have even become my ally - guiding and directing me as to my next opportunities for growth and healing.

The question we must continuously ask ourself is this: what are we hiding from ourselves and others? For some of us, our first response comes in the form of a negative habit of which we are secretly ashamed - smoking, over eating, creating debt, being overly critical of others or ourselves, etc. While these behaviors may indeed be what we wish to hide from others, what we are trying to hide from ourselves is the feeling or emotional reaction which may be fueling these habits and addictions.

What part of us gets caught in this inner game of hide and seek? Most often, it is that part of us who wishes to look "good" no matter what. At some time in our early lives we become concerned with presenting an idealized self image to the world. For girls, this often may involve internalized messages about being a "nice" girl (whatever that is) and for boys, the message is often about being strong, brave, and fearless. Inevitably, one day we realize that we are not the perfect people we think we ought to be. Our challenge is this: Do we allow ourselves to be emotionally honest and real in the world, possibly risking the rejection of family and friends whose approval and acceptance we desire, or do we go underground with our "undesirable" feelings, hoping to hide them from others and even ourselves?

Unfortunately, hiding our feelings is somewhat like trying to keep inflated



beach balls submerged in a pool - it requires great energy and vigilance. Over time, this process can become a full time job, requiring a full time addiction to distract ourselves from these hidden emotional truths. The damage this may cause to our self-esteem, sense of integrity, and intimate relationships is potentially great.

How, then can we make ourselves available to living our lives with greater authenticity and realness? Experience has taught me that we need only be willing to listen to the language of our hearts - our desires, resistances, fears, anger, joy, and peacefulness - in order that we may know our truths, whatever they may be. Beyond that, we need to honestly acknowledge these feelings, and respond to them in a way that brings our inner awareness and intention into greater alignment with our outer actions and expression. Said another way, we must become willing to be fully human - genuine, fallible, vulnerable, and, in our own way, Divine. This seems to be a small price to pay in exchange for greater personal freedom and integrity.



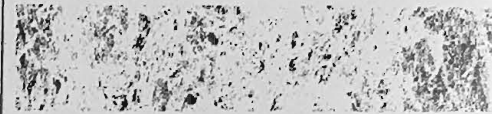
SUSAN M. HAMBURGER, M.A., *Individual, Child, and Family Counseling Psychology*

Susan Hamburger is a psychotherapist with a private practice in Boulder who specializes in marriage, child, and family therapy. She teaches for the Boulder Public School's Lifelong Learning Program, and is a trained bereavement counselor. In addition to thirteen years working with children, she has worked extensively in the fields of addiction, sexual abuse, and womens' issues and holds a second Master's Degree in Spiritual Psychology from University of Santa Monica.



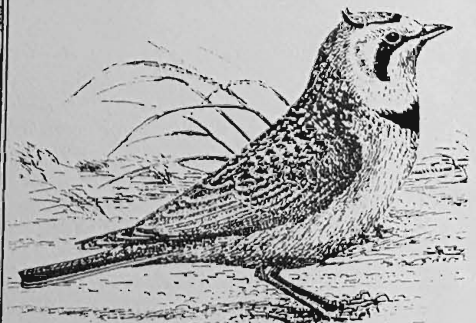
GOLDFINCH

Spinus tristis tristis (Linnaeus)



DOWNY WOODPECKER

Dryobates pubescens medianus (Swainson)



NORTHERN HORNED LARK

Otocoris alpestris alpestris (Linnaeus)

HAWTHORN (*Crataegus* sp.) Berries and new flowers taken as tea (1 cup) or tincture (20-50 drops) 3 times daily as cardiac and circulatory tonic.

ASHWAGANDHA (*Withania somnifera*) Root powder boiled in milk for infusion: 1 cup 2 times daily for impotence and infertility.

ASTRAGALUS spp. Decoction of root, or root added to stews, rice, beans, soups etc., taken daily to enhance immune system, as a tonic for lungs and kidneys and to enhance overall health.

BEARBERRY (*Arctostaphylos uva-ursi*). Leaves brewed into astringent tea, ½ cup 4 times daily to treat infection of bladder and kidneys.

CORN SILK (*Zea mays*). Eat fresh silks, or use them to brew tea, 1 cup 3 times daily for inflammation of genito-urinary tract caused by cystitis, prostatitis and urethritis.

DAMIANA (*Turnera diffusa*). Leaves and stems made into an infusion (1 cup 3 times daily) or tincture (15-40 drops 3 times daily) to treat male depression and as aphrodisiac.

DEVIL'S CLUB (*Oplopanax horridus*). Bark of root made into decoction (1 cup 3 times a day) or tincture (15-30 drops 3 times daily) for arthritis, rheumatism & diabetes.

PIPSISSEWA (*Chimaphilia* spp.) Leaf and stem steeped (NOT boiled) into infusion (1 cup 3-4 times daily), or take 20-40 drops tincture 3 times daily for chronic irritation of prostate or urethra.

SAW PALMETTO (*Serenoa repens*). Berries made into decoction (1 cup 3 times daily) or take 25-50 drops tincture 3 times daily to soothe bladder and/or some male reproductive system, including enlarged prostate.

YOHIMBE (*Pausinystalia yohimba*). 1 oz. bark simmered in 2 cups water for 5-10 minutes, strain, add 1000 mg. Vitamin C (for easier assimilation). Take 1-2 cups decoction 1 hour before sex as aphrodisiac. Use for only 2 weeks.

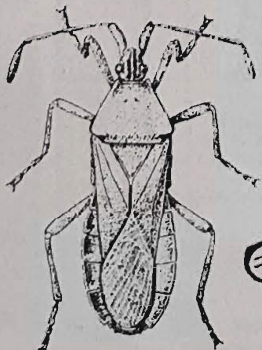
extracted from:

THE MALE HERBAL-Health Care for Men & Boys
by James Green. The Crossing Press 1991

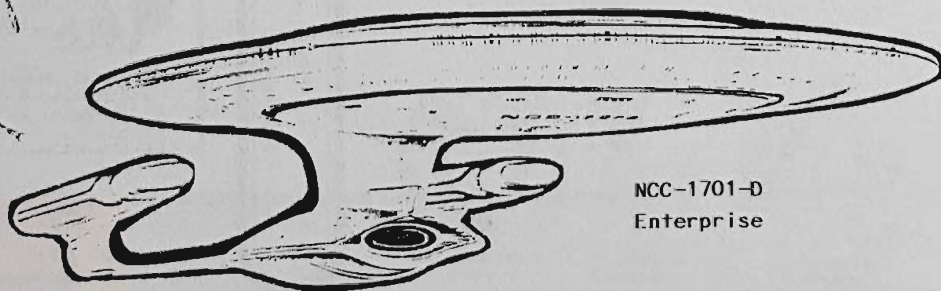
HERBS FOR MEN



"No one knows all that can be contained in the male heart, possibly least of all, we men who caretake the male spirit. We do know that men, too, are sensitive, fragile beings who presently hold the power to evolve or destroy our planetary home." James Green



Squash bug.

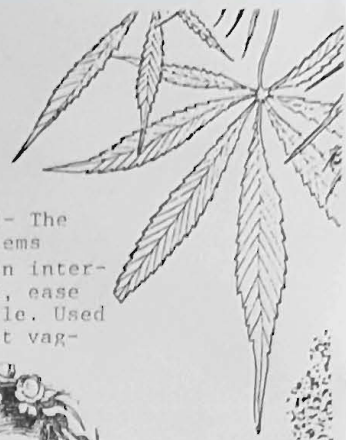


NCC-1701-D
Enterprise



Harlequin bug.

Herbs for Women



FEVERFEW (*Tanacetum parthenium*)-A weak tea taken after childbirth has long been used to help expel placenta and tone the uterus. Also used for uterine disorders and migraines. May affect clotting rates, so avoid feverfew if taking blood-thinning medications.

WOOD BETONY (*Stachys officinalis*)- Considered a uterine stimulant to be avoided DURING pregnancy, but a hot infusion of the flowers, stems and leaves may be taken to ease a difficult or painful labor.

MOTHERWORT (*Leonurus spp.*)- An infusion of the stems, leaves and flowers has been valued by women for centuries as an aid for difficult childbirth, to reduce the risk of postpartum bleeding, for menstrual pain, and to stimulate menstrual flow. Used as a douche, the infusion is used to combat vaginal infections. Considered a uterine stimulant that should be avoided during pregnancy.

LAVENDER (*Lavandula spp.*)- A weak infusion of the flowers and leaves (25% normal strength) given to babies for colic and indigestion. Full strength for Mom for headaches and depression.

ST. JOHN'S WORT (*Hypericum perforatum*)- Infusion of the flowers, leaves and stems taken for anxiety, irritability and emotional upheaval, especially if linked to menopause or premenstrual syndrome.

POT MARIGOLD (*Calendula officinalis*)- An infusion of the yellow-orange flower petals taken to ease menopausal pain and irregularities.

BORAGE (*Borago officinalis*)- An infusion of the leaves and flowers, plus fennel seed, taken by lactating mothers to increase milk flow.

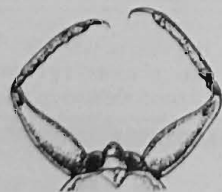
MARSHMALLOW (*Althea officinalis*)- A strong decoction of the mucilaginous roots is taken to soothe urinary inflammations from cystitis, etc. The roots of the closely related garden hollyhock may also be used.



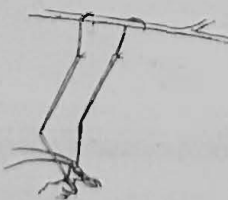
extracted from:
THE COMPLETE MEDICINAL HERBAL
 by Penelope Ody. Dorling Kindersley 1993



CICADA NYMPH
(Digging)

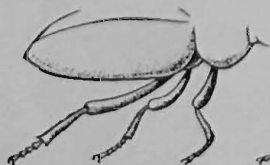


GIANT WATER BUG
(Holding)

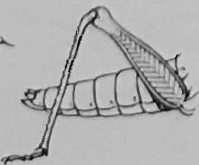


WINGLESS HANGING FLY
(Hanging)

Different Kinds of Insect Feet



DARKLING BEETLE
(running)



GRASSHOPPER
(jumping)



DRAGONFLY
(catching prey)



WATER BOATMAN
(swimming)

Different Kinds of Insect Legs

Hate is a weapon we wield by the blade. Margaret Head



Oh, so that explains the difference in our salaries!

7

"It's getting hard to be someone but it all works out." The Beatles

Radical Plants

GOLDEN THISTLE.

Scolymus hispanicus, L. *Compositæ*.

French, *Scolyme d'Espagne*. Dutch, *Varkens diel*. Italian, *Barba gentile*. Spanish, *Escalimo*.

Native of Southern Europe.—Biennial.—A plant with a white and rather fleshy tap-root. Radical leaves oblong, usually variegated with pale green on a dark-green ground, very spiny, and narrowed at the base into the leaf-stalk; stem very branching, from 2 to 2½ ft. high, furnished with sessile, decurrent, and very spiny leaves; flowers of a bright yellow colour, in sessile heads of two or three flowers each; seed flat, yellowish, surrounded by a white scarious appendage. A gramme contains about 200 seeds, and a litre of them weighs about 125 grammes. Their germinating power lasts for three years. The seed is sown in March or April, in well-dug soil, in the same manner as Salsafy, and the plants are afterwards treated in exactly the same way as Salsafy plants. The roots may commence to be taken up for use in September or October, and will continue to yield a supply during the winter. The roots are eaten like Salsafy. They are often 10 to 12 inches long, and nearly 1 inch thick.



Golden Thistle (½ natural size; root, ¼ natural size).

HOP.

Humulus Lupulus, L. *Urticaceæ*.

French, *Houblon*. German, *Hopfen*. Flemish, *Hop*. Italian, *Luppulo*. Spanish, *Lupulo*.

Native of Europe.—Perennial.—This is not, properly speaking, a kitchen-garden plant, but as, in some countries, the young shoots are often used as table vegetables, we think it should be noticed in the present volume. When the plants commence to shoot in spring, most of the shoots are pinched off, so as to leave only two or three of the strongest to each plant. The shoots thus removed are used as vegetables. In Belgium the young shoots are much used as a table vegetable, prepared in the same way as Asparagus or Salsafy.

ICE-PLANT.

Mesembryanthemum crystallinum, L. *Ficoideæ*.

French, *Ficoide glaciale*. German, *Eiskraut*. Flemish and Dutch, *Ijsplant*. Italian, *Erba ghiacciola*. Spanish, *Escarbosa*.

Native of Greece or the Cape of Good Hope.—Perennial, but grown in gardens as an annual.—A spreading, round-stemmed plant. Blade of the leaf widened towards the extremity, and contracted towards the stalk; flowers whitish, small, with a swollen calyx, which is covered, as are all the green parts of the plant, with small, very transparent, membranous bladders, which give the plant the appearance of being covered with frozen dew; seed very small, black, and shining. A gramme contains about 5700 seeds, and a litre of them weighs about 760 grammes. Their germinating power lasts for five years. The culture is exceedingly easy. The seed is sown like Spinach seed, and the plants bear hot and dry weather admirably. This quality and the thickness and slightly acid flavour of the fleshy part of the leaves have caused it to be used as a fresh table vegetable for summer use in warm, dry countries. However, it is rather a plant to be grown as a curiosity in the gardens of amateurs, and it is also not without merit as an ornamental plant. The leaves are eaten minced and boiled.



Ice-plant (½ natural size).

UNICORN-PLANT.

Martynia, Lindl. *Sesunaceæ*.

French, *Martynia*. German, *Gewsenhorner*.

The plants of this genus are tall, stout, vigorous-growing annuals. Stem fleshy, 1½ to 1¾ inch in diameter; leaves large, heart-shaped, of a grayish-green colour, and somewhat hairy; flowers large, resembling those of a Catalpa in shape, and yellow or lilac, according to the species; fruit elongated, ovoid, curved, and terminating in a long hooked point, and enclosed in a soft green kind of shell which dries up when ripe, the fruit then becoming woody and of a blackish hue, and the extremity dividing into two long crooked horns, as it opens to allow the seed to escape; seed large, black, with an irregular rough or shagreened surface. A gramme contains about 20 seeds, and a litre of them weighs about 290 grammes. Their germinating power lasts for one or two years. CULTURE.—These plants require a moderate amount of heat, and it is advisable to sow the seed in a hot-bed and either allow the plants to complete their growth there or plant them out in good soil in a warm place. USES.—The fruit, gathered while young and tender, is pickled in vinegar. It should be gathered when not more than half-grown, as, after that, it becomes too tough and leathery.



Unicorn-plant (¼ natural size).

The Yellow-flowered species (*M. lutea*), figured in the accompanying illustration, is a native of Brazil, and is a plant of moderate size, somewhat trailing in habit, and yielding an abundance of small-sized fruits. It is the kind most grown for pickling in the United States.

M. proboscidea, Glox., a violet-flowered species, has fruit of larger size and with longer horns. It is a native of Louisiana.

RAT-TAILED RADISH.

Raphanus caudatus, L.

Radis serpens.

Native of South Asia.—Annual.—The edible part of this Radish is not the root, but the silique or seed-vessel, which is gathered before it is fully grown. This, instead of being short and thick, as in other Radishes, is very much elongated, often twisted, scarcely as thick as a lead-pencil, and often 8 to 10 inches long. It is frequently violet coloured, and has a somewhat pungent flavour, like that of the Small or Forcing Radishes. CULTURE.—This plant is extremely easy to grow. The seed is sown in May, where the plants are to stand, in a warm position if possible, and in about three months the plants commence to flower and yield pods or seed-vessels. USES.—The fresh pods are eaten raw, like Radishes, or they may be pickled in vinegar.

AFRICAN VALERIAN.

Fedia Cornucopie, Gartn. *Valerianaceæ*.

French, *Valériane d'Alger*. German, *Algerischer Baldrian*. Flemish, *Speenkruid*. Dutch, *Speerkruid*.

Native of Algeria.—Annual.—Stems erect, branching, smooth, 1 ft. to 16 inches high; leaves almost all radical, oval oblong, entire, bluntly toothed, and of a rather dark, shining-green



African Valerian (½ natural size).

colour; flowers pink, in terminal clusters; seed yellow or grayish, oblong, thick, convex on one side, and marked on the other with a deep longitudinal furrow. A gramme contains about 250 seeds, and a litre of them weighs about 110 grammes. Their germinating power lasts for four years. The seed may be sown in the open ground, from April to August, in drills 10 to 12 inches apart. When thinned out and plentifully watered in hot weather, the plants quickly form rosettes of leaves, which are fit for use in about two months after sowing. The plant is somewhat sensitive to cold, and is not so suitable for sowing in autumn as the Corn-salad. The leaves are eaten as salad.

**"SAL" AMANDA GETRICH'S
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9959 Valley View Rd.
Eden Prairie, MN 55344-3585

(800) 654-1047: Creator of some VERY progressive BIOLOGICALLY ACTIVE fertilizers (i.e. "Ringer Lawn Restore" so often mentioned in this publication) plus biological pest controls. Call for suppliers in your area.

GARDENS ALIVE!

5100 Schenley Place
Lawrenceburg, IN 47025

(812) 537-8650. Their free catalog is an education in itself, complete with color pics of pests and beneficials. Botanical and mineral insecticides, predators, cover crops, birdhouses, tools, pet care products.

MAY WAY TRADING CHINESE HERB COMPANY

1338 Cypress St.
Oakland, CA 94607
(510) 208-3113: Importer of Asian herbs.

BENEFICIAL INSECTS, INC.

P.O. Box 40634
Memphis, TN 38174-0634
(901) 276-6879.

TANGLEFOOT CO.

314 Straight Avenue S.W.
Grand Rapids, MI 49504
(616) 459-4139. Manufactures a range of ultra "sticky" products used to trap various pests via physical adhesion vs. toxicity.

SEQUIOA NURSERY

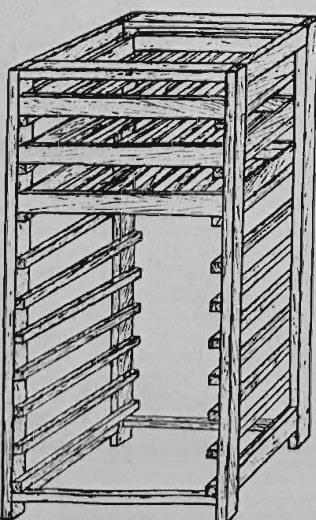
2519 East Noble
Visalia, CA 93292
(209) 732-0190.

Owner Ralph Moore is a world famous rose breeder who over the last 60 years has given the world many, if not most, of the miniature roses in commerce. His catalog offers many miniatures, plus a fair number of Old Roses, and unusual Modern Roses, all on their OWN ROOTS. Catalog \$1.

THE NATURALISTS

P.O. Box 435
Yorktown Heights, NY 10598. Herb seeds. Inquire for catalog.

"There are victories of the soul and spirit. Sometimes, even if you lose, you win." Elie Wiesel



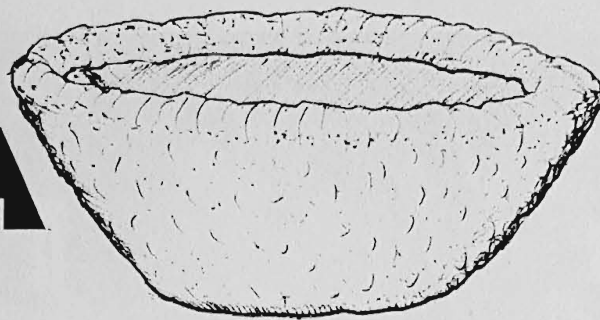
A wooden fruit-storing cabinet which consists of movable trays. May also be used for drying herbs indoors.

ANAL-RETENTIVE GARDENING TIPS:

1. Buy every single freakin' pesticide you can find at your local, friendly gardening supply outlets and hardware stores (i.e. Alachlor, Atrazine, Cygon, Diazinon, Glyphosate, Lindane, Chlordane, Dicamba, Weed-B-Gon, We-Be-Death, DDT, Toxaphene, Sevin, Orthene, Kilz-its, Kilz-Dat, etc.) and store them NEATLY LINED UP, ALPHABETICALLY on pristine, dust-free brand new shelves in your workshop. Use a label gun to designate their sacred spot on that shelf.
2. Buy a spiral notebook and keep a detailed record of every pesticide related death in your yard, whether purposeful or incidental: be sure to list the fatalities ALPHABETICALLY under each appropriate zoological division. Example: Underneath "VERTEBRATES" list "Aunt Martha, Bobwhite, Cardinal, Dog (neighbor's), Fido (ours), Garter snake, Jehovah's Witness, newt, robin," etc. Underneath "INVERTEBRATES" enter "Ant, Caterpillar, Earthworm, Flanders (the obsequious guy next in line for promotion above you; your boss's current favorite golf buddy), Neelix, Praying Mantis, Wesley Crusher" etc.
3. Use a Polaroid camera to photograph every victim and collect them ALPHABETICALLY in a scrapbook. Make all your friends and relatives sit down with you individually and look at EVERY picture, mentioning which pesticide application you credit with their demise.
4. Steadfastly refuse to acquire ANY information about gardening organically and ridicule anyone you know who does.



HYPERTUFA



"If only it was as easy to banish hunger by rubbing the belly as it is to masturbate."

"Dai teh! Dai teh! Dai teh!"
Yoko Ono

Developed in England by gardeners that collected alpine and rock plants but faced a continual shortage of appropriate containers, "HYPERTUFA" is a cheap, easily-made-at-home mixture of Portland cement, fine sand (or perlite or vermiculite) and peat moss. With it one can sculpt natural-looking containers for herbs, alpine plants, bonsai, succulents, etc. plus stepping stones, low garden walls or even artificial "boulders" for the garden.

Buy Portland cement (94 lb. bag about \$4), 100 lb. bag masonry sand (again about \$4) and a 4 cubic foot bale of peat moss (\$10-\$15). Mix the dry ingredients in an old washtub or buspan (look in restaurant dumpsters) then SLOWLY add enough water, mixing all the while, to result in an easy-to-shape doughy mixture. If you wish to color the hypertufa "dough" to avoid the greyish cast of Portland cement, you can buy concrete coloring agents at a well-stocked local hardware store, or go to a good pottery supply house for "Spanish Red Iron Oxide" for reddish-tan sandstone colors. (Be sure the commercial colorants are non-toxic if you plant to grow medicinal or culinary herbs in your hypertufa containers).

To shape your hypertufa mixture into the desired form, you can use ready-made (homage to Duchamp!) molds like plastic dishpans or plastic mixing bowls sprayed with Pam for easier release of the cast objects. Or, if you want a more natural form, just dig a hole of the desired shape, size, and depth in an unused part of your garden, then dampen and pack the sides and bottom of the hole firmly. (Some of the soil will bond to the surface of the hypertufa object, further "naturalizing" it. If you want geometric forms, use plywood to form rectangles, cubes, triangles, etc., lashing them into easily disassembled molds for quick release of cast objects once they have set. If you want an uneven surface on your geometric casts, first line the mold with a sheet of burlap or plastic, which will also act as a mold release while altering the surface texture of your creation.

Wearing rubber gloves to prevent cement burn of your hands, plop blobs (real scientific, huh?) of hypertufa mix into your mold...smear and press it into place all over the sides and bottom at a thickness of at least 1½ inches...but thicker than that will give you a more primitive "Fred Flintstone" look, greater strength but reduced inner volume of your container. When you have created the final shape, use the tip of your index finger to poke 1 or 2 drainage holes at the

bottom. If you plan to grow swamp-loving bog plants in the container, use a thin twig to make 2 tiny drainage holes.

To insure a steady slow "cure" for a strong cast, keep the hypertufa cast from drying out by covering it completely with a damp old bedsheet folded into a few layers, or a sheet of plastic, or a few layers of damp burlap. Let it cure for 2-3 days, protecting it from heavy rain. Then, pop the cast out of the mold and peel away any plastic or burlap you may have lined the mold with. Handle your cast gently, for it will be brittle for about a week. If you wish, use a wire brush or handfuls of coarse sand to scrub the surface to texturize it. Then, if you wish it to have a reddish sandstone color, spritz your creation with water then give it a liberal (Newt Alert!) sprinkling of the common garden acidifier "iron sulfate" (copperas) available in 5 lb. bags at most nurseries. Within a day the iron will stain the hypertufa object a rusty red-and-brown color which will persist for years.

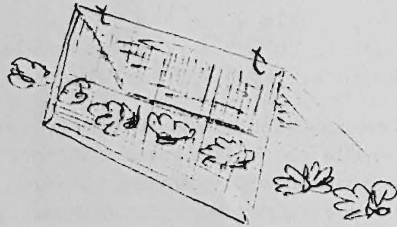
Hypertufa containers are initially very alkaline due to their cement content, so if you are growing alkali-loving plants like cacti, oregano, rosemary, dianthus, chard, baby's breath etc. just fill your new pot with an appropriate compost blend (add coarse sand for cacti) and plant away. But for plants that prefer slight acidity (most do) rinse the container and let it sit through several rains. Or rinse it in straight vinegar. Then fill your pot with compost and add your plants or seeds.

Hypertufa pots lend themselves to sculptural plants like Hen-and-Chicks (*Echeveria* spp.), sedums, euphorbias, cacti or bonsai. If you live in a rainy humid area and want to create an ancient old growth forest look, monthly brush buttermilk on your container to foster the growth of algae and moss. In such a container ferns, native violets, Scotch Moss (*Sagina subulata*) and trilliums look very nice indeed. Hypertufa pots are excellent for plant collectors who want a unified look for their grouping: miniature roses, cacti, lithops, amaryllis, crinums or herbs all would look great grouped in hypertufa pots.

One last thing; You can make different textured hypertufas by changing the ratio of ingredients from the basic of 1:1:2 (by VOLUME, not weight) of Portland, sand and peat to 1:1½:1½. Or switch milled sphagnum for the peat.



2 discarded window screens can be leaned together over a lettuce plant like an A-frame roof to cast a delicate cooling shadow that may delay bolting in the summer heat. Lashing them together at the top ends where they meet with two pieces of speaker wire will create a hinge that also keeps the 2 screens from sliding apart. Several of these screen shades can be lined up to cover the whole lettuce row, especially if you retrieve sliding glass door window screens (each about 6 feet long) from a window manufacturer dumpster.



To somewhat control fleas, bathe your pet weekly with a mixture of shampoo and Pine Sol. Be sure to foam up their face and ears well using a no-tears baby shampoo, as the fleas try to escape to that "dry high ground". The pine cleaner will help kill the fleas, plus deodorize and sanitize the flea-bitten skin. Sprinkle your carpets with boric acid powder; wait two weeks then vacuum. Vacuum weekly to suck up flea eggs and adults. The boric acid is non-staining, so sprinkle it beneath couch cushions, on the pet's bedding, beneath beds and livingroom furniture, closet floors, anyplace where flea eggs can hatch. Sponge mop linoleum floors weekly with pine cleaner to eliminate eggs and newly-hatched larvae.

For cutworm barriers cut out the bottoms of yogurt cups with a sharp paring knife, then insert them over seedlings in the garden, pressing the narrow end 2" into the soil.

SHARING SECRETS

Picking spent tulip and daffodil blooms as soon as the petals fade will strengthen the bulbs by preventing needless formation of seed pods. Good for amaryllis, crinums, true lilies, alliums etc. also.

To render a weedy grassy area suitable for gardening, fertilize it heavily with a high-nitrogen organic soil amendment like cottonseed meal, sheep or horse or poultry manure, etc. If soils in your area are acidic, broadcast powdered dolomitic limestone over the whole area as heavily as you would flour a cake pan. Water very deeply, till the soil is saturated. Then cover the entire area with a single sheet of thick, black plastic, using long heavy boards or a row of bricks to hold the edges tightly to the ground for maximum heat build-up. Let sit in the sun for 2-3 months; solar heat, plus heat from the composting action caused by the high-nitrogen nutrients and the decay of the sod, (plus the release of ammonia by their decay) will "cook" the grass and weeds, plus most dormant seeds. Then, pull back the plastic to find rich, moist, loose composty, very fertile soil ready for turning and planting. Note* This technique can also be used to rid an area of troublesome perennial weeds.

Try using straight vinegar or clear non-sudsing household ammonia in a trigger spray bottle to "fry" out weeds in driveways and sidewalks. Spray them in the morning on a sunny day; by sundown they should be history.

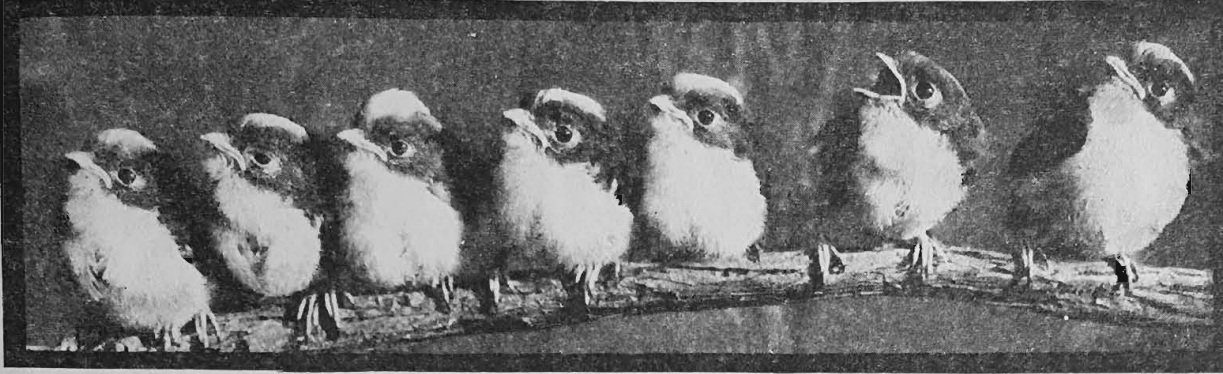
If your "blue" hydrangeas always flower pink, acidify their soil with cottonseed meal, oak leaf compost, or a handful of powdered sulfur. For pink hydrangeas sweeten their soil with a handful of powdered limestone...too much though and they may get chlorotic leaves.

Excess zucchini can be lightly cooked or steamed, pureed in a food processor or blender, then poured in yogurt cups or cottage cheese tubs and frozen. In winter thaw the puree to use as a thickener for gravies and soups, or add to muffin mix, pancake batter, bread dough, dumplings, etc.

Big discarded painter's ladders, anchored into the soil with stakes and baling wire, can make interesting and effective trellises for very vigorous vining squashes like "Sweet Meat", "Buttercup", banana squash, "Hubbard" squash, plus bird house gourds and the edible gourd "cucuzzi" (both *Lagenaria* spp.).

Run zucchini leaves and a bit of water in your blender, then pour the green slurry into an old pillow case and squeeze out the green juice. Try as a fly repellent on you and Fido.

"Every day people are straying away from church and going back to God." Lenny Bruce 1923-1966



LIST OF PLANTS
TO
ATTRACT BIRDS

BIRDS IN THE GARDEN

NAME, DESCRIPTION AND FRUITING SEASON

Rose,
R. nutkana
To 5 ft.; flowers pink, large, solitary; fruit a red hip.
All year

Sarsaparilla, Wild,
Aralia nudicaulis
A perennial herb to 1 ft.; fruit berrylike, purplish-black.
June-August

Serviceberry, or Shadbush
Amelanchier alnifolia
Shrub to 7 ft.; flowers white; fruit purple.
June-September

Silverberry,
Eleagnus argentea
Silvery-leaved shrub to 12 ft.; flowers fragrant; fruit silvery.
All year

Skunkbush,
Rhus trilobata
Shrub to 6 ft.; fruit red in clustered spikes.
All year

Snowberry, or Wolfberry,
Symphoricarpos occidentalis
Shrub to 5 ft.; flowers pinkish; fruit white.
June-October

Snowberry, Mountain,
S. oreophilus
Shrub to 5 ft.; flowers pinkish; fruit white or pink.
August-September

Snowberry,
S. albus
Shrub to 3 ft.; flowers pinkish; fruit snow-white.
July-October

Strawberry, Wild,
Fragaria americana
Small perennial, usually with silky leaves; fruit red.
July-August

Sumac, Smooth,
Rhus glabra
Shrub or tree to 20 ft.; fruit scarlet and hairy.
September-October, persistent

Thimbleberry,
Rubus parviflorus
Unarmed, erect shrub to 6 ft.; flowers white; fruit red.
July-October

Twinberry,
Lonicera involucrata
Shrub to 8 ft.; fruit black, shiny, surrounded by purple bracts.
August-September

KNOWN TO BE EATEN BY

ruffed grouse, hermit and olive-backed thrushes, solitaire, sharp-tailed grouse, ring-necked pheasant, dusky grouse.

hermit thrush, pine grosbeak, ruffed grouse.

catbird, robin, evening grosbeak, cedar waxwing, ruffed and dusky grouse, hairy woodpecker, solitaire, black-headed grosbeak.

catbird, hermit thrush, red-headed woodpecker, pine grosbeak, hairy woodpecker.

ruffed grouse, red-shafted flicker, evening grosbeak, mountain bluebird, robin.

ruffed grouse, evening grosbeak, ring-necked pheasant, dusky grouse, pine grosbeak, robin.

cedar waxwing, dusky grouse, ruffed grouse, catbird, robin, kingbird, black-headed grosbeak.

ruffed grouse, robin, catbird, hermit thrush, red-headed woodpecker, pine grosbeak.

cedar waxwing, ruffed grouse, Steller's jay, dusky grouse, catbird, olive-backed thrush, red-headed woodpecker, pine grosbeak, Arctic towhee.

cedar waxwing, olive-backed thrush, pine grosbeak, Arctic towhee.

NAME, DESCRIPTION AND FRUITING SEASON

Juniper, Alligator,
Juniperus pachyphloea
Tree to 60 ft.; fruit reddish-brown with a bloom.
All year

Juniper, Cherrystone,
J. monosperma
Tree to 50 ft.; fruit bright blue with a bloom.
All year

Juniper, Colorado, or Red Cedar,
J. scopulorum
Tree to 30 ft.; fruit bright blue with a bloom.
All year

Lotebush, Texas Buckthorn or Chaparral,
Condalia obtusifolia
Thorny, intricately branched shrub; flowers inconspicuous; fruit mealy, bluish-black.
June

Madrona,
Arbutus arizonica
Large evergreen tree; flowers white; fruit red.
July-December

Manzanita,
Arctostaphylos pungens
Evergreen shrub; branches rooting; fruit red.
July-April

Mountain-Ash,
Sorbus dumosa
Large shrub or small tree; fruit red.
July-December

Rose,
Rosa suffulta
To 1 1/2 ft.; flowers pink, in clusters; fruit a red hip.
All year

Rose,
R. woodsii, var. fendleri
Bush to 4 ft.; flowers pink, occasionally white, solitary; fruit a red hip.
All year

Serviceberry, or Shadbush, Western,
Amelanchier alnifolia
To 7 ft.; flowers white in erect clusters; fruit purple.
July-September

Serviceberry, Cluster,
A. polycarpa
Large shrub or small tree; flowers white; fruit purple, very abundant.
August

Shadbush, *see* Serviceberry.

KNOWN TO BE EATEN BY

evening grosbeak, mockingbird, pine grosbeak.

golden-fronted woodpeckers feed it to their young, phainopepla, masked bobwhite, Mearns' quail.

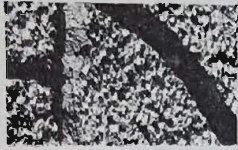
no data.

Gambel's quail.

evening grosbeak, pine grosbeak, robin, dusky grouse.

cardinal, hermit thrush, bluebird.

Western tanager, Western bluebird, cardinal, Bullock's oriole, evening grosbeak, black-headed grosbeak.



BAD

News

Using the Upper Atmosphere Research Satellite, NASA researchers have discovered hydrogen fluoride- a CFC by-product that has no natural source, in combination with chlorine in the stratosphere. Plus natural chlorine accounts for only about 20% of the chlorine found in the stratosphere. These findings reinforce the notion that ozone-thinning is not a cyclical natural event.

SCIENCE NEWS 12-24-94

Possibly due to cow's milk containing the sugar galactose, which seems to be toxic to human eggs, there is a correlation between declining fertility and high consumption of milk, even in women 20-24 years old.

AMERICAN JOURNAL OF EPIDEMIOLOGY, 2-1-94

Coal naturally contains the radioactive metals uranium and thorium. U.S. coal-burning power plants burned 616 million tons of coal in 1982, releasing 1,971 tons of thorium, and 801 tons of uranium (11,371 pounds of which was the highly radioactive U-235 used in atomic bombs) into the atmosphere. But in 1982 the U.S.'s 111 nuclear power plants consumed 540 tons of nuclear fuels, far less than what coal-burning power plants emitted as air pollution.

OAK RIDGE NATIONAL LABORATORY REVIEW, Fall 1994

Increasing atmospheric levels of carbon dioxide, a global-warming gas released by the burning of fossil fuels, may have a fertilizing effect on the world's plant life, which would then absorb more of this gas. But researchers have discovered that elevated carbon dioxide levels will likely result in significantly higher emissions of the much more potent greenhouse gas methane, based on studies conducted near the Chesapeake Bay by the Smithsonian Institution's Environmental Research Center.

NATURE July 7, 1994



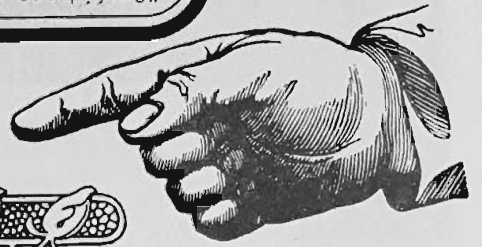
book review by YOGI ONO

"THE MALE HERBAL-Health Care for Men and Boys" by James Green 1991

Far more than an herbal, this long overdue book provides men with a loving and insightful guide on their journeys through life, health crises, and their own complex inner geographies. The seemingly gentle, likable author views the modern Western male as often-maligned, emotionally isolated, driven, and denied the close companionship of other men, especially their own fathers. He calls for the reinstating of male rites of passage into manhood, that men be allowed, even encouraged, to acknowledge and express all those feelings admonished by cultural programming that says "Big boys don't cry" and "A real man is never vulnerable". This preamble to a book on herbal medicine for men is based on the view that whole health involves the whole man...body, emotions, thoughts and spirit. He expresses this eloquently, succinctly and lovingly.

But the bulk of the book concerns health issues of the male human body, the preparation of herbal decoctions, infusions, concentrates, tinctures and more. Plus it offers a fine review of medicinal plants, complete with detailed line drawings. A glossary of herbal and medicinal terms helps to clarify the actions of these herbs on the male body. He also offers a primer on general health care and nutrition, drawing a parallel between the decline in the vitality of global ecology and that of the human immune system. Grounded in science, based on medicinal herbal botany, and colored by a warmth so refreshing to see expressed BY a man for other Western men, this book should be read by every man, and by the woman (or man) that loves and seeks to understand and support him.

"Confidence in nonsense is a requirement for the creative process."
- Dick Rutan



THE GARDEN



In all parts of North America spring is returning as the earth's northern hemisphere once again leans towards the sun during daylight hours. The resulting increase in the intensity of sunlight and radiant warmth striking each square foot of land and sea chases away the chill of winter, triggering new growth in dormant seeds, tubers, bulbs, trees and shrubs. Birds and insects migrate home, and gardeners migrate in flocks to their warming soil, trembling hands clutching seed packets and shovels and winter-drawn garden plans. Spring fever is an elation like no other.

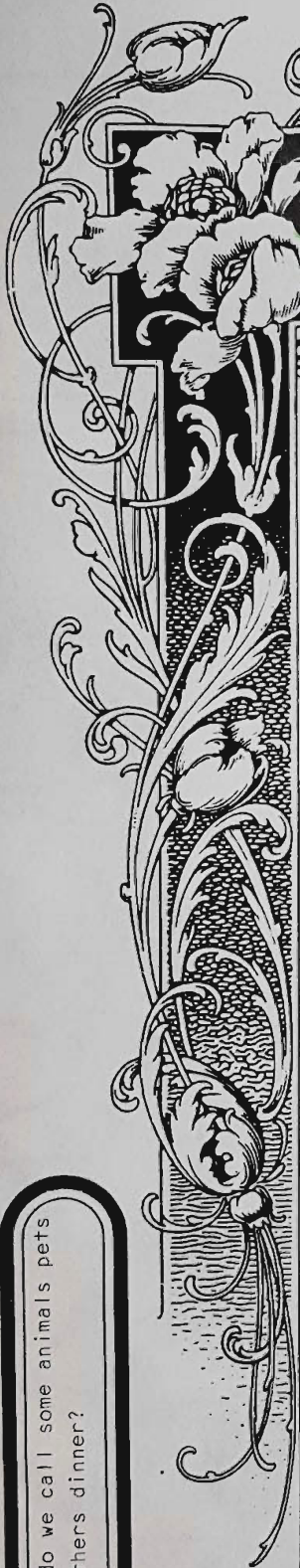
Gardeners in temperate zones where winter is cold and/or snowy can use February, March and April to start veggie and flower seeds in bright south windows to get a head start (no Newt, this is a DIFFERENT headstart). To keep the seedlings from getting leggy, make a reflector of cardboard or foam core covered with aluminum foil and position it behind the seedlings to aim sunlight onto their backsides. March and April is a good time to feed the soil beneath your lawn, and in your beds of perennials, roses, plus your veggie garden. Cottonseed meal, manure, Ringer Lawn Restore, fish emulsion, compost, kelp meal, or fish meal are all fine, depending on your style of vegetarian ethics. If you live east of the Mississippi where soils tend to be acid, now is also a good time for your annual sprinkling of powdered dolomitic limestone, which "sweetens" the soil while giving your soil the nutrient calcium, plus the magnesium crucial to chlorophyll formation. Coldframes made from discarded double-pane windows lashed together with corner braces and caulked along the seams, with removable double-pane windows laid across the top as a heat-and-light gathering ceiling will let you gain 6-8 weeks of early spring growth...just open up the top on sunny days to avoid cooking your crops...replace the top at sundown to trap the day's warmth. Such a coldframe is not only a good way to grow heat-loving crops like okra and eggplant "to term" in northern areas, it can be a terrific place to sunbathe on a chaise lounge on a chilly spring day!

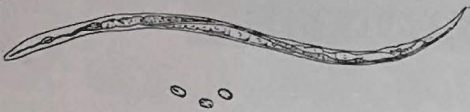
Gardeners in milder, subtropical regions like southern California, the Gulf coast, Florida and southern Arizona can use the spring months to feed their ever-hungry soil...desert gardeners can combat the excess alkalinity of their soil with acid-formers like cottonseed meal, poultry manure and thick organic mulches. Now's the time to cut back fast-growing perennials and shrubs (and the pompadours on TV evangelists) by 50%. These mild climate regions make it possible to experiment with true tropical food crops like the various edible elephant ears (tannier, taro) plus cassava, sugar cane, lemon grass, white (true) yams, plus many fruits, seeds or divisions of which can often be bought live in the produce section of those nifty, full-of-interesting smells Thai and Vietnamese grocery stores tucked away in your town. Strategic plantings of bamboo and shade trees can create cooler zones in the yard to retreat to when the heat becomes hellish. And the summer months will generally see a higher success rate if you are rooting cuttings of woody and semi-woody perennials in builders sand...try it.

And gardeners everywhere can choose to see that, just as they make choices each spring that fill their bellies later in the year, they can daily choose to tend the garden within them, knowing that we are all wounded a bit beneath the mulch of adult sophistication we have so carefully replenished and manicured for so long. All we need is love.

"Acknowledging a painful past does not mean reliving it indefinitely into the future."
Margaret Head

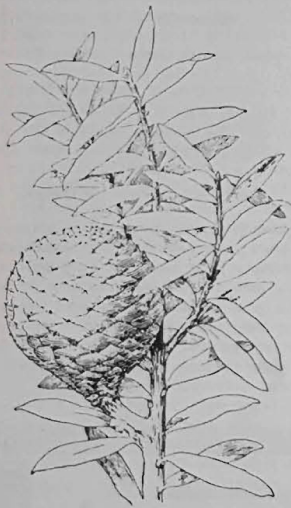
Why do we call some animals pets and others dinner?



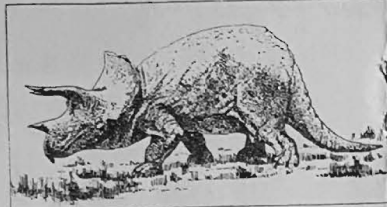


A NEMATODE (near-microscopic worm) & eggs.

Agathis australis. KAURI-PINE. Immense massive tree to 100 or extremely to 200 feet tall and with a trunk diameter of 20 feet; bark glaucous gray, falling off in large flakes; leaves opposite, rarely alternate, sessile, oblong or obovate-oblong, $\frac{3}{4}$ -1 $\frac{1}{2}$ inches long, obtuse, on young trees oblong to narrow-lanceolate and 2-4 inches long; staminate flowers $\frac{3}{4}$ -1 $\frac{1}{2}$ inches long, solitary; cones terminal on short branchlets, erect, subglobose, 2-3 inches across; scales terminating in a short mucro. New Zealand. Cultivated out-of-doors in California, but not very successfully. Kauri gum, much used in the manufacture of varnish, is the partly fossilized resin of *A. australis*. It is found 5-6 feet below the surface of the ground in the northern part of New Zealand where there were vast forests of this tree in ages past.—*Agathis australis*, Steudel, *Nomenclator Botanicus*, ed. 2, i, 34 (1841); *Dammara australis*, Lambert, *A Description of the Genus Pinus*, ii, 14 (1824).



Agathis australis. (X $\frac{1}{2}$)



COURTESY AMER. MUS. OF NATL. HISTORY
TRICERATOPS, A HORNED DINOSAUR

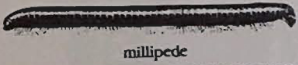
A TRANS TETRA-OPSYLLIN



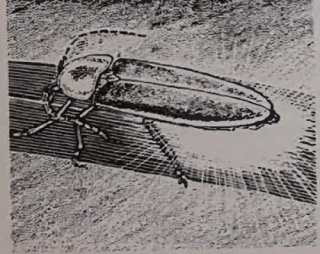
HONEY LOCUST



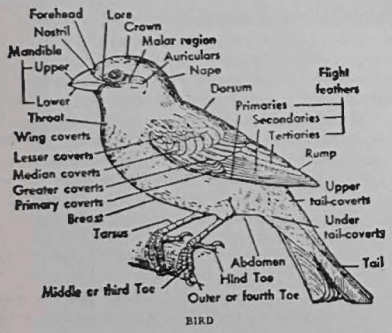
The southern green stinkbug, *Acrostus variolatus*, nymph. (After Morrill, U.S.D.A.)



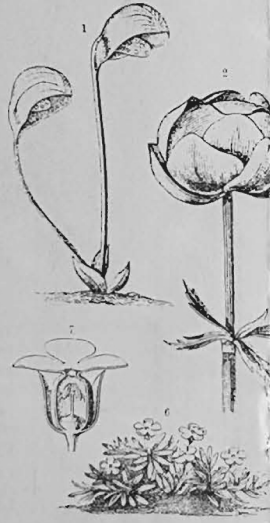
millipede



Firefly.



BIRD



1 *Ariopsis peltata*. 2 Flower of *Trollius europaeus*.
3 A single flower of *Digitalis lutea* in longitudinal section (magnified).

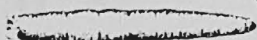


tent caterpillar





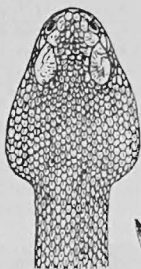
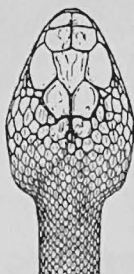
sunfish



crane fly larva



chafer beetle



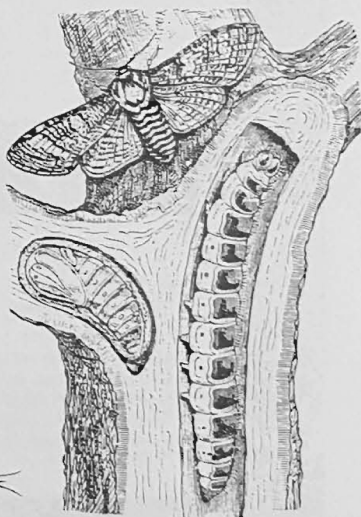
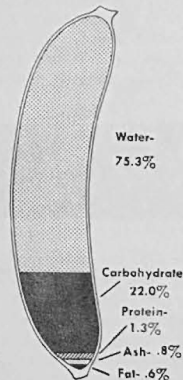
Heads of moccasin (left) and rattler compared. Note the small scales on top of the head in the rattlesnake.



FOOD VALUE OF A BANANA

TREE SWALLOW

Iridoprocne bicolor (Vieillot)



—Goat Moth (*Cosmos hirsiperda*), Caterpillar, and Pupa (natural size)



Protection of Pollen from Wet.

The same with some of the floral-leaves removed. * *Digitalis lutea*.
 † floral section. ‡ *Arctia glacialis*. § Single flower of *Arctia glacialis* in



Marcel Duchamp was best



mole cricket



m Y — S E E D S

On your seed packet with 1 green alfalfa chlorophyll fingerprint write: **INDIAN RICE GRASS** (*Oryzopsis hymenoides*). Native to the plains and deserts of the western U.S. and Canada, this very drought tolerant perennial grass is excellent for native plant reclamation projects. Wild birds are attracted to the delicate airy seed heads which are beautiful in dried arrangements. Native Americans once gathered the high protein seeds and ground them into flour. Best to start the seeds in pots in a pH-neutral compost (add crushed limestone); sow seeds $\frac{1}{2}$ " deep and keep damp. Germination is in 4-6 weeks. Transplant seedlings into garden or bird attracting area when a few inches high. Or sow seeds directly into garden in late autumn for spring germination. This cold hardy perennial may likely do poorly in hot, humid southern states due to a lack of winter chilling and dormancy.

On your seed packet with 2 green alfalfa chlorophyll fingerprints write: **CALIFORNIA POPPY** (*Eschscholzia californica*). Granted, this is one of the least exotic seeds to come with THE GARDEN DOCTOR, but it seems many gardeners have never grown this charming, drought tolerant self-sowing native annual. Rake the seeds into the soil where they are to grow in a full sun location. Sow the seeds in early spring in temperate areas, late autumn in mild subtropical regions. Water lightly daily till seedlings appear in about 10 days; the seedlings are difficult to transplant. The grayish-green rosette shaped plants should begin blooming in 6-8 weeks. Blooms even longer if plants are deadheaded weekly; if not the plants self-sow readily, especially in temperate areas. Good for hot dry areas of the yard, or for beautifying empty lots or roadsides. Try in pots on sunny balconies. Medicinal. Wind-dancer.

On your seed packet with 3 green alfalfa chlorophyll fingerprints write: **WILD ROSE** (*Rosa woodsii*). Native to much of the western U.S. and plentiful in Colorado's mountains. This pink, very fragrant, single (5-petalled) species rose sets abundant red, vitamin C-rich hips that persist well into winter. Best in full sun but tolerates shade, plus grows well in damp or dry conditions. Spreads by underground runners so is good for erosion control. Rose seeds are NOT easy to germinate...try sowing them $\frac{1}{2}$ " deep in sterilized compost or "Sunshine Mix No.3" in a 4" pot, water, then place inside a clear produce bag; poke a hole or 2. Store in the fridge for 90 days or till sprouts appear. Transplant seedlings to garden when 4"-6" tall. If no germination in first year, try leaving pot outdoors (keep damp) all winter to freeze and thaw, as in nature. May take 7 YEARS to germinate!

Store these seeds, and all your other seeds in the meat or produce drawer of your refrigerator to keep them viable for YEARS and to improve overall germination rates.



READERS DIGESTED

Dear John,

Of course I want to renew my subscription to your wonderful, offbeat rag. I was waiting to see if we would buy a house so that I would have a place to plant all these nifty seeds you've sent me. Well, indeed we have, and not far from your place on Willow St. Keep up the great work! Sincerely,
Josie Carleno, Denver, Colorado

Dear John,

What merchandizing! What wit! Keep The Garden Doctor coming! I have this vision of the underground and all your seeds mirthfully giving birth; old cities being crumbled by new roots and shoots; young people clamoring and stammering for old issues; and young and old going out in friendship to plant seeds and see plants in the growing. Peace.
Richard Vander Veen, Tampa, Florida

Hi John

got your gift subscription invitation the other day and wanted to take advantage of it for a couple friends. Simon works at a nursery and is a tea master. Penny is my sister-in-law and then some. Enclosed is a couple of pictures, one my son Nevin (3) took of me and I of him, thought it would be fair for you to have an image. Any time you want to climb a 200' redwood stop by or tell your readers I'd like to guide folks that can. **Mike Mahoney, P.O. Box 1311, Healdsburg, CA 95448**

Hi John,

Sign me up for another 2 years! Check enclosed. Looking forward to the next issue!
Becky Ross, Gaithersburg, Maryland

Thanks, John!

Keep up the great work!

Mike Hittner, Wisconsin Rapids, Wisconsin

Dear John-

Thanks for my first issue of your GARDEN DOCTOR plus seeds. I've been waiting. And, no, I did not receive the Spring '94 issue, in answer to your inquiry. Loved your article on Costa Rica- I've been to Lancaster Gardens and loved it, too. I hope we all survive Newt Gingrich and his full complement. **Nell Kneibler, Healdsburg, California**

Hi John-

This has been a great Sunday- mostly spent in bed (during our first big rain of the season) with bagels/cream cheese, 49'er football, (& later Broncos), Donald, sleeping cat, voter pamphlet, & the latest issue of GARDEN DOCTOR --This was a GREAT issue & it's good to know that your various endeavors are going so well...Here's my 2 year renewal...Thanks!

Sue Burrell, Mill Valley, California

Dear John,

THE GARDEN DOCTOR is the only periodical I ever read cover to cover! It is still great...wish it came more often. **Maggie Brandt, Eminence, KY**
(P.S. Keep the change).

By the way, I still haven't read much of this publication. No offense. It's a time thing. Kris DOES read it, and enjoys it very much. Thank you for an alternative approach to "things". It makes the world a better place. Sincerely, **Kris' husband for Kris Richardson's B-day, Albany, Oregon**

Hi John!

Extend me for 2 more years! Continuing to love your output! Best wishes,
John Spellman, Beverly, MA

Neat newsletter! Keep up the good work!

Dick Patton, Westerville, Ohio

Dear John,

I just wanted to drop you a note thanking you for your wonderful publication. A good friend gave me a subscription because the zine sounded like something I'd enjoy and I did. It was so good that it inspired me to begin writing again, and reminded me, during Upstate New York's most severe winter in many years, that spring would come, and it has! The quality and creativity of the magazine are admirable, but it was the uncompromising humor and optimism that really struck me. THE GARDEN DOCTOR seems to be a powerful expression of one of the most positive people I've encountered. We all have ups and downs, but your zine is clearly an effort on your part to understand and promote your best self. As such it spurred me to creativity and hope. I trust you'll have many more years and growing seasons working on THE GARDEN DOCTOR and hope you enjoy everything that comes your way. Thanks again! Love, **Richard Gomez, Ithaca, NY**

Dear John,

Enclosed is check #1259 in the amount of \$16 to cover the cost of a 1 year sub. of "The Brilliant Gd. doctor Mag."-Please send it with love to: Jo Reeves, Seattle, WA. I hope you had a wonderful winter and I look forward to your next creation please please keep on writing/researching- as I and so many others gain so much knowledge and pleasure from your written words. It's always comforting to know that there are others out there in the same boat as myself...It will pay off in the end- People will change how they live their lives. **Dervilla Gowan, Seattle, WA**

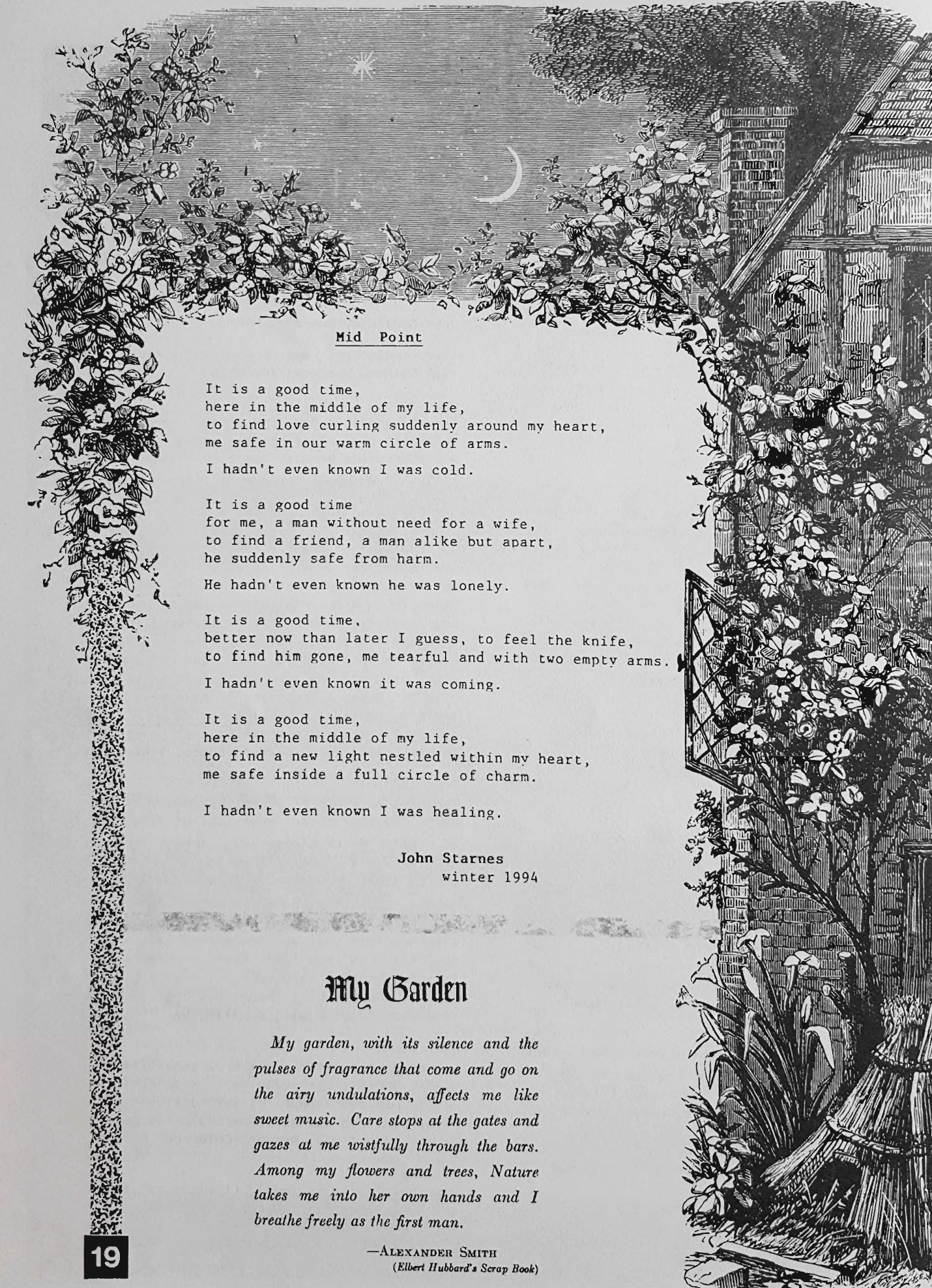
Dear John,

Enclosed is a check for \$16 to subscribe to THE GARDEN DOCTOR. The magazine is a delight! You really put much wonderful information in the publication, and the satirical humor is great. Sincerely, **Ron & Roy, Denver, Colorado**

Hi John!

Hope this finds you well. It was great having you at The Art Festival last summer- I hope we can do it again this year!

Suzanne Farver, Woody Creek, Colorado



Mid Point

It is a good time,
here in the middle of my life,
to find love curling suddenly around my heart,
me safe in our warm circle of arms.

I hadn't even known I was cold.

It is a good time
for me, a man without need for a wife,
to find a friend, a man alike but apart,
he suddenly safe from harm.

He hadn't even known he was lonely.

It is a good time,
better now than later I guess, to feel the knife,
to find him gone, me tearful and with two empty arms.

I hadn't even known it was coming.

It is a good time,
here in the middle of my life,
to find a new light nestled within my heart,
me safe inside a full circle of charm.

I hadn't even known I was healing.

John Starnes
winter 1994

My Garden

*My garden, with its silence and the
pulses of fragrance that come and go on
the airy undulations, affects me like
sweet music. Care stops at the gates and
gazes at me wistfully through the bars.
Among my flowers and trees, Nature
takes me into her own hands and I
breathe freely as the first man.*

—ALEXANDER SMITH
(Elbert Hubbard's Scrap Book)

PHUKINAP!

A 260 pound watermelon was grown in 1985 by Jason Bright of Hope, Arkansas. **Guinness Book of World Records**

The longest known name of any rose is: "Souvenir des Fiancailles de l'Archiduc Rodolphe d'Autriche et de la Princesse Stephanie des Pays-Bas", introduced into commerce in 1880.

Scientists taking sedimentary core samples from the bottom of the Pacific Ocean have found.... **LIVE BACTERIA** in sediments 500 meters below the ocean floor, despite the crushing pressures and intense heat.

SCIENCE NEWS 10-1-94

"One acre of Hemp will make the same amount and quality of paper as four acres of 20 year old trees without the need for chlorine in the bleaching process, creating no toxic dioxin pollutants."

U.S.D.A. Bulletin #404

Styrene, found in many plastics like Styrofoam, has been found occurring naturally in beef, strawberries, oats, cinnamon, coffee, peaches, peanuts and wheat.

Journal of Agricultural and Food Chemistry August 1994



A newly discovered steroidal antibiotic called "squalamine" kills gram-negative and gram-positive bacteria as effectively as ampicillin while also killing fungi and protozoa. Where is this remarkable antibiotic found? In the stomachs of dogfish sharks.

Karen S. Moore, "Proceedings of the National Academy of Sciences" 2-15-93

Gordon Graham of Edmond, Oklahoma grew a 53 foot 6 inch long tomato plant in 1985. **Guinness Book of World Records**

200 gallons of fossil fuels are burned, releasing 2 TONS of carbon dioxide, in order to produce the amount of beef eaten annually by the average U.S. family of four.

Alan B. Durning & Holly B. Brough "Taking Stock: Animal Farming and the Environment". Worldwatch Paper #103, 1991

52 million acres of Earth's land are rendered unproductive by desertification annually. The primary contributing factor causing this desertification is cattle production.

Walter H. Corson "The Global Ecology Handbook" 1990, "New Scientist" May 6, 1989

POTPOURRI 1

- 3 CUPS LAVENDER BLOOMS
- 3 CUPS APPLE-SCENTED GERANIUM LEAVES
- 1 CUP APPLE MINT
- 1 CUP YARROW BLOOMS
- 2 DROPS LAVENDER OIL
- 3 TBS. ORRIS ROOT

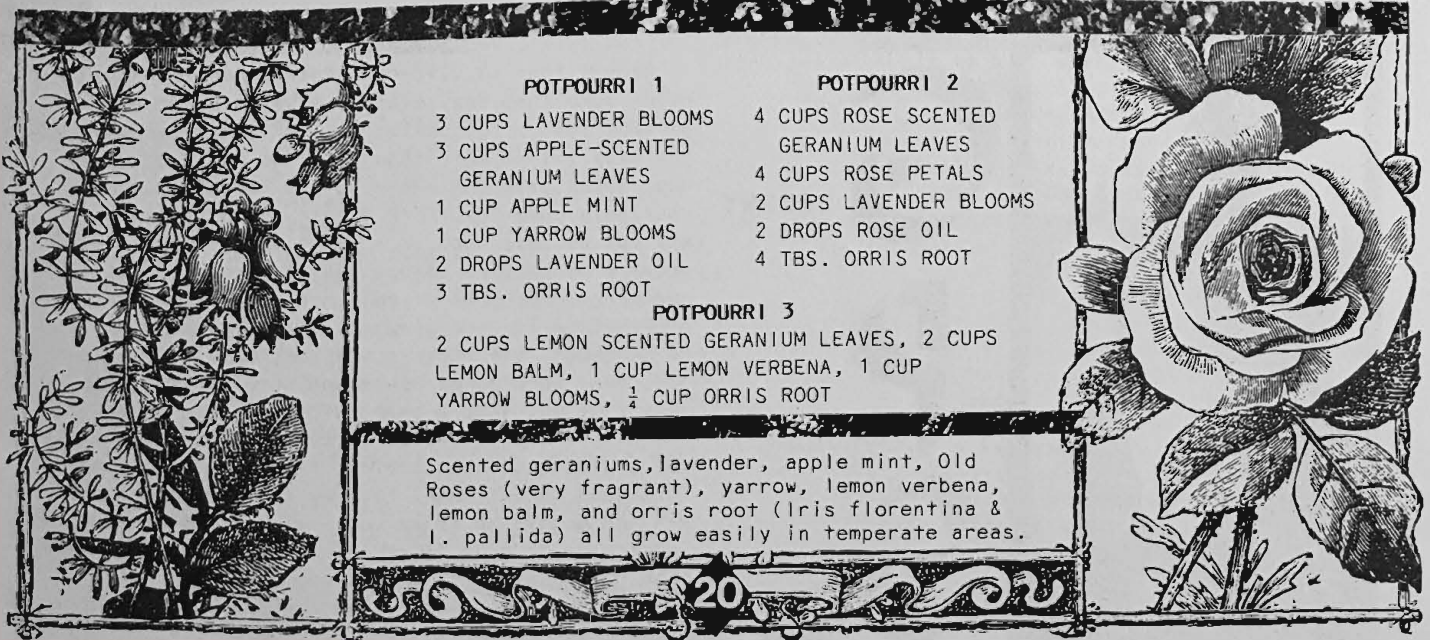
POTPOURRI 2

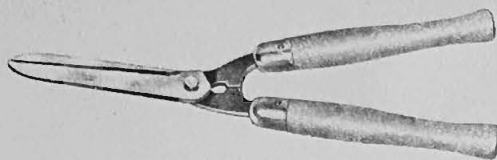
- 4 CUPS ROSE SCENTED GERANIUM LEAVES
- 4 CUPS ROSE PETALS
- 2 CUPS LAVENDER BLOOMS
- 2 DROPS ROSE OIL
- 4 TBS. ORRIS ROOT

POTPOURRI 3

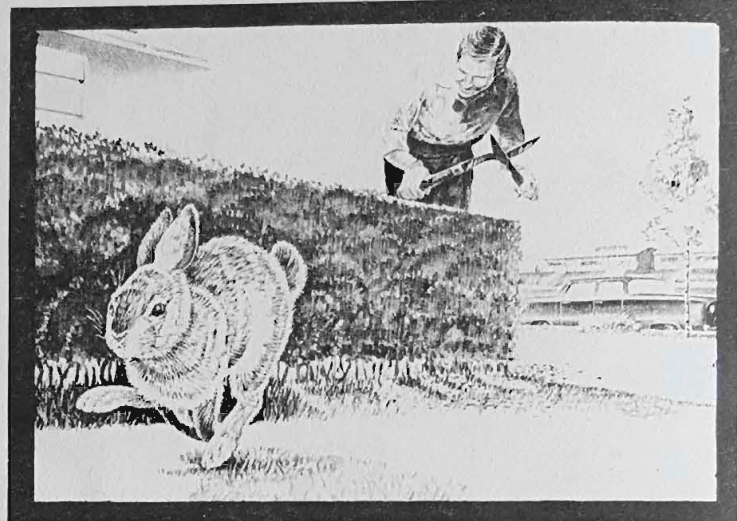
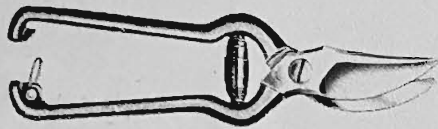
- 2 CUPS LEMON SCENTED GERANIUM LEAVES, 2 CUPS LEMON BALM, 1 CUP LEMON VERBENA, 1 CUP YARROW BLOOMS, 1/2 CUP ORRIS ROOT

Scented geraniums, lavender, apple mint, Old Roses (very fragrant), yarrow, lemon verbena, lemon balm, and orris root (Iris florentina & I. pallida) all grow easily in temperate areas.





**PRUNING
FLOWERING
SHRUBS** by Lyle Lacque



Ever prune a forsythia or lilac bush one year only to see it refuse to bloom the next spring? Or have you pruned a hedge in late summer then watched helplessly as the first autumn frost killed all the new growth? If you live in Southern California or Florida you may continually find yourself with lanky overgrown bushes because you don't know WHEN to prune them during their year-round growing season. Relax, I'm the "Expert-Texpert Bush Man with a PLAN" with some simple pruning guidelines...Read on, Bush Baby!

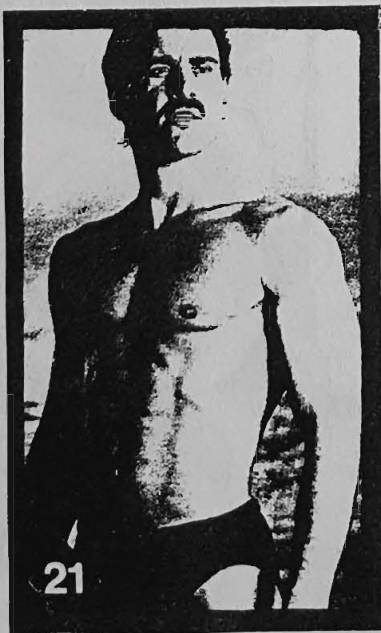
SHRUBS THAT BLOOM ONCE A YEAR ON YEAR-OLD WOOD: (Lilacs, forsythia, flowering quince, gardenia, azaleas, rhododendrons, once-blooming Old Roses, flowering almond, camellia, cinquefoil, ornamental crabs, redbud, viburnum)- Prune IMMEDIATELY after flowering, as soon as the petals have dropped. Prune lightly on slower growers like azaleas and lilacs, but cut back by 50% rampant growers like forsythia or bougainvillea.

SHRUBS THAT BLOOM ON NEW GROWTH: (Rose-of-Sharon, abelia, honeysuckle, beauty berry, Rugosa roses, bladdernut, hypericum, hydrangea, pussy willow)- Prune in late winter or very early spring. Repeat-blooming roses, Old or Modern, can be cut back by 1/3 (or cut back every OTHER branch by 1/3 if you wish) as soon as the first bloom phase has peaked. (Late June in temperate areas) This causes waves of new growth for fall rebloom.

IN SUBTROPICAL REGIONS (Florida, S. California, Gulf Coast, etc.)-Hibiscus, iantana, oleander, pittosporum, China and Tea roses, night-blooming jasmine, pentas, bush allamanda, star jasmine, plumbago- Prune hard (by 50%) in early March, then again in late August or early September, if you wish to keep them smaller.

And remember to give your bushes and hedges a good feeding of organics high in nitrogen (compost, manure, fish emulsion, cottonseed meal, Ringer Lawn Restore, etc.) after the spring pruning to give the plants the nutrients they need to support all the new growth that erupts after pruning. Prune, then feed.

"Beware of little expenses; a small leak will sink a great ship." Benjamin Franklin



GREGORY
PRES
SEZ:

Okay I fess up...there's not too many things I enjoy more than sex, even by myself. So as a man I am VERY fond of my penis, yet for years I rewarded him with little more than a pat on the head. But hey, women have the sense to use herbal douches to routinely care for THEIR "Stairway to Heaven", so why not us guys too? So a few times a month I make about 1 quart of a strong tea of yarrow, sage, lavender and chaparral, then I add a couple drops each of Tea Tree Oil (*Melaleuca alternifolia*) and oil of Bergamot, stirring it all very well. I then pour this tea, warm as my penis and scrotum can comfortably take it, into a short wide vase and lower in "My Little Buddy" (my girlfriend calls him Gilligan) for a gloriously comforting, fragrant, cleansing, 10 minute herbal soak. Then my girlfriend dries him off and enjoys me at my most relaxed and cleanest and freshest; plus her "Ginger and Mary Anne" won't risk contagion. I may be a dumb jock, but I can read...I got this idea from "The Male Herbal" by James Green, 1991. Yo, bro! Soak your Joe!



ROSES

by
John Starnes

FOR CREATIVE HEDGES

Hedges can serve many purposes: privacy, windbreaks, living walls to divide landscapes into parcels, erosion control, bird habitat, or to accent one's home. But most of the woody plants that are so over-used for hedges (hardy privets, ligustrum and photinia in the south, pittosporum, juniper (ESPECIALLY juniper!), boxwood, etc.) are poor sources of garden color, cut flowers or usable fruits. But certain varieties of roses, when grown on their own roots (vs. grafted onto rootstocks like "Dr. Huey", "Fortuniana", "Manetti", or *R. multiflora* & *R. canina*) will readily give us those three benefits, in addition to growing into useful hedges.

In temperate regions where subfreezing temperatures are common throughout winter, the following shrub roses, if planted about 3 feet apart, will give you a dense hedge in a few years if you feed their soil in March and July with manures, fish emulsion, Ringer Lawn Restore, cottonseed meal, kelp meal, compost, alfalfa meal, etc., while supplying plenty of water during dry spells. All are tough landscape plants once established, and if cut back by 50% during their second winter, they will grow much more densely. Note: those varieties followed by an "R" are repeat-blooming.

TALL HEDGE: (6'-8')

1. "Dog Rose" (*Rosa canina*). Ancient European species with 3" white or pink single (5-petaled) blooms in June followed by multitudes of red, oblong and VERY flavorful vitamin C-rich hips tasting best after a few frosts.
2. "Sweet Brier" (*Rosa eglanteria*). Ancient European species with 1" pale pink single blooms followed by tiny hips relished by birds. Leaves richly scented of sliced green apples!
3. "Desiree' Parmentier" (*Gallica*) circa 1838. Dense, very heavy June bloom of very full, richly fragrant multi-toned pink old fashioned roses. Shrub is dense, care-free, suckers well.
4. "Rosa alba semi-plena". Europe circa 1100. Lush greyish-green foliage, semi-double white 3" blooms in June followed by numerous, tasteless big red hips.

"You just take a woman for granite!"
Lisa Douglas "Green Acres"

MEDIUM HEDGE: (4'-5')

1. "Hansa" (Hybrid Rugosa) 1905. Fully double, gorgeous violet-magenta blooms heavily scented of Old Roses and cloves. Big edible hips. (R)
2. "Rosa rugosa rubra". Species parent of "Hansa". Same in every way but blooms are single (5 petals). (R)
3. "Rosa rugosa alba". Same as "rubra" but the rose-and-clove scented roses are pure white. Plenty of big tasty vitamin C-rich hips.
4. "Queen of the Bourbons" Bourbon (1834). Big dense bush, heavy spring bloom of sweetly scented semi-double roses followed by many (probably poorly flavored) hips. Possible autumn rebloom; don't hold your breath.
5. "Baronne Prevost" Hybrid Perpetual 1842. A classic "Old Rose" with thorny stems topped with sumptuous many-petaled, gloriously fragrant pink blooms in June. If cut back by 1/3 as those blooms fade will rebloom heavily in late summer and autumn. Encountering this rose as a Florida tourist visiting Colorado in 1986 blew me away with its scent and full blooms, and I wasn't even a rose nut yet! Close to impossible in my home state of Florida as this rose REQUIRES a period of winter chilling and dormancy. Good for a hedge as it is dense and suckers well on its own roots. Burying your nose in those lush blooms will, for a moment, enliven and heal a weary heart.

Now, in good ole Florida, all along the Gulf Coast, in southern Arizona and probably all of coastal California, Oregon and Washington, gardeners can use the delightful subtropical Tea and China roses (which infected me with "Rose Fever" a few years back) plus certain Bourbon and Noisette roses, all of which are repeat-blooming (some nearly constant) while offering a wide spectrum of scents. Only "Old Blush" (1752) THE ancestor of nearly ALL repeat-blooming Modern Roses, reliably sets hips, but of poor flavor.

(continued on next page)

(continued from previous page)

"In the time of your life, live---so that in that wondrous time you shall not add to the misery and sorrow of the world, but shall smile to the infinite variety and mystery of it all."

William Saroyan 1908-1981

The Banksia roses can get VERY big in mild climate regions, are nearly thornless, and produce multitudes of small, violet-scented blooms in spring only. For a hedge, plant Bourbons, Teas, etc. about 3' apart (5' apart for Banksias) in soil heavily enriched with compost or manure or alfalfa pellets, plus micronutrients (kelp meal or agricultural frit) plus TONS of dolomitic limestone if you live in central Florida or elsewhere where soil tends to be very acid and thus low in calcium and magnesium. In sandy areas mulch both sides of the newly-planted hedge with 8" of hay to keep the soil moist and cool. Feed the soil beneath the hedge quarterly since your roses will be growing 365 days a year. Use high nitrogen nutrient sources like poultry poop, cottonseed meal, human urine saved in a bottle by the toilet, horse poop, Ringer Lawn Restore, alfalfa meal, etc. A 50% cut-back each spring just when frost danger has passed will keep the hedge in bounds AND encourage dense growth, although some of "Teas" may "sulk" (not bloom much) while re-growing from the cutback, although my customers in Florida report that this has not been a problem. If you live in a very sandy area like Tampa, it's a good idea to do as I do and add a great deal of cheap clay cat litter to the planting hole along with the dolomite, alfalfa pellets, micronutrients, handful of Epsom salts (magnesium source for strong basal shoots and chlorophyll formation), Ringer Lawn Restore (for beneficial microbes) and fresh organic matter like bush trimmings, organic grass clippings, etc. Roses love clay, it helps the sand hold moisture and nutrients, and cheap white clay cat litter is the most convenient and economical way to get it. After planting the hedge in sandy soil you can then periodically "mulch" the rose hedge with 1" of catlitter: remulch once or twice a year with 8" of hay to cool and improve the soil. A little extra labor when planting the hedge will give you a bigger and healthier hedge later on that requires much less care while giving you MORE roses. Remember, these subtropical

roses bloom almost continually, so by weekly treating yourself to a long-stemmed bouquet for the house you will also be keeping the hedge steadily trimmed. Few other, if any, hedge plants offer a steady stream of fragrant cut flowers. Below are some of the Old Roses I have provided for my landscape customers in Tampa...if your winters are mild and generally touched only by frost (vs. blizzards and sub-freezing Denver-esque winters) they are likely to thrive for you too.

MEDIUM HEDGE: (4'-5')

1. "Old Blush" (China Rose) circa 1752- Pink, semi-double blooms almost continually, lightly fragrant, abundant hip set.
2. "Louis Philippe" (China) 1834- Clusters of small, crimson, very cupped, very fragrant roses nearly continually.
3. "Mutabilis" (China) Ancient. 5 petalled blooms open yellow, turn pink then red! Big easy bush.
4. "Safrano" (Tea) 1839. Semi-double pale apricot-yellow blooms (good scent) almost continuously. Tough and reliable, important ancestor of many Modern Roses.
5. "Maggie" (study name, Bourbon?, Eugene E. Marlitt, 1900?) Richly spicy-sweet scented, very full magenta-pink blooms almost constantly on problem-free bush.
6. "Duchesse de Brabant" (Tea) 1857. Glowing, warm seashell pink, VERY cupped, rich smokey-citrus-tea fragrance. Blooms like crazy, sets many poorly-flavored hips.
7. "Blush Noisette" (Noisette) circa 1817. Big clusters of pale pink, cupped, small double blooms oozing a rich clove-cinammon-musk-rose fragrance that lifts my heart every time! The first true Noisette, a problem-free heavy bloomer. Can be trained as a bushy climber.

LOW HEDGE: (2'-3')

1. "Ducher" (China) 1869. Much like a pure white version of "Louis Philippe" on a smaller bush with a fruitier scent in the cupped roses.
2. "Clothilde Soupert" (Polyantha) 1890. Very double, very fragrant ghostly-pale pink blooms. Few thorns, continuous bloom.
3. "Cecile Brunner" (Polyantha) 1881. Tiny, perfectly-formed light pink blooms like miniature Hybrid Teas. Interesting scent, very healthy in hot humid Florida.
4. "Perle d'Or" (Polyantha) 1884. Very similar to "Cecile Brunner" but of a very variable warm range of yellows and oranges and pinks and apricots, deeper when first open.

"Of all afflictions, the worst is self-contempt." Berthold Auebach 1812-1882

THE BIGGER THE HAIR



THE CLOSER TO GOD ?

26 Animals die every minute in the U.S. alone..



to test new shampoos, hairsprays, laxatives, and oven cleaners

ANTIQUE ROSE EMPORIUM sells own-root roses both bare root & in pots via UPS. Great Folks! 1-800-441-0002

August

When the heat sears you, old loves bore you, new loves annoy you, and the entire human race wearies you, float on your back in cool blue water and look at a cloud.



MOSELLE CUP

In each of 2 pitchers you put 2 or 3 lumps of ice, the juice of 1 lime, 1 pony of Cognac, 1 of maraschino, 1 of Curaçao, 1 teaspoon of grenadine, 4 slices of orange, and 2 of lemon. You pour into each 1 quart of still Moselle and 1 bottle of plain soda. On top a few sprigs of fresh mint.

Reasons for inviting guests to a garden party:

Because they are decorative, because they are amusing, because they will be consumed with envy of your Iris, because they will love your garden.

May 26

The indifferent rabbit

Last night you forgot to pull the curtains. You go to the window and lean out to watch the sun coming up the hill, gilding the undersides of the birch leaves. Something moves down by the brook. It is a rabbit, a cotton-tail brazenly eating the violets you planted yesterday.

"Go away," you shout, "go away." He gives you an indifferent glance and takes another bite.

You rush down stairs and out into the dew, brandishing your arms. Cotton-tail dashes through the hedge.

July 7

The moon and you

Sleep is far away. The moon creeps under the edges of the blinds and stretches white fingers across the bed. You step into your mules and go down stairs where Jack in his pajamas is trying to find a breeze. He is in the kitchen making a Texas fizz.

TEXAS FIZZ

You squeeze half a lemon and as much orange juice while he puts in 1½ wine glasses of gin. A bottle of cold soda water is on the tray.

"Let's go into the garden." It is cooler there. A sweet heavy perfume rises from the flowers. The moon makes a strange, unbelievably beautiful world of ebony and silver.

"That's the way it is," whispers Jack, "a few moments of magic and long stretches of monotony. Do you mind the stretches, Jinny?"

"No," you answer, and you can hardly speak for the tightness in your throat.

January 27

From the pantry shelf

All night long the snow has fallen, soundlessly, persistently, as if the sky were a limitless sieve.

It clings to the branches and fences and glitters like the setting for a Russian fairy tale.

The children are eager to take out peanuts for the squirrels and crumbs for the birds but it seems like flaunting magic to make the first track.

Magic or no, the evergreens must be freed from the snow and some of the bushes that are leaning grotesquely sidewise. And there are paths to shovel.

The snow plow won't be around for hours.

You rummage on the pantry shelf for a canned dinner.

- Corn chowder
- small French peas sweet potatoes
- creamed chicken on toast
- figs and cream

"It is a wise snowman who doesn't fear being translated into a violet."

May 25

Garden Party

Jack covers his third popover with honey and stares through the window at the Beauty-bush. Next its fragile pink spray is a deeper Weigelia. The oriental Poppies are out and the painted Daisies and a glory of Iris down by the wall, Tuscan gold, Ballarina, a subtle blue-violet, Midgard, rose yellow, and Princess Beatrice.

"When I think of it all, my back aches."

"Your back aches, you Saturday-to-Monday gardener. How about giving a credit line to God and me?"

"Right," he answers, beginning a fourth popover. "I'll take the Iris and let the credit go. Let's have a garden party this afternoon, ruffled parasols and everything. I'll produce the guests if you'll shake the ice.

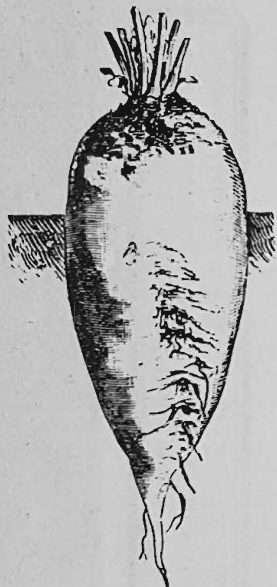
"Moselle cup. It's warm enough."

In the Denver Botanic Gardens library I found a tiny old gardener's diary dating from the 1930's.... I find it a privilege to 60 years later peer into the life and heart of this woman, to see the love she held for her husband Jack and for her garden. Perhaps our own diaries will similarly enrich future hearts someday. John.



WISDOM OF THE BODY: The case for "organically grown"

by Arlene Kellman, D.O.



White Gray-top Sugar Beet
($\frac{1}{2}$ natural size).



25

Organically-grown foods have become increasingly popular in recent years. Yet they are primarily only available at farmers' markets and health food stores. In supermarkets, where the average American shops, conventionally-grown produce is sold much less expensively. Most people don't even consider buying organic produce because, "It's too expensive." Is it really?

What is meant by "organically-grown"? This varies from state to state when it comes to the formal certification process. But in general terms, organically-grown refers to food grown without the use of synthetic fertilizers or pesticides (including herbicides and fungicides).

Prior to World War I, almost all farming was "organic." Chemical agriculture essentially began in 1915 when the first synthetic ammonia plant—converting free atmospheric nitrogen into liquid ammonia—was built in Germany. This plant supplied nitrogen for chemical fertilizers and drugs, as well as for explosives and poison gases. When World War I ended, the resultant surplus of nitrogen was dumped on crops.

The same practice occurred in the United States after World War II when ammonia factories built to supply explosives lay dormant. Chemical companies sold the nitrogen surplus to farmers and heavily promoted its use. Around the same time, DDT was introduced as an agricultural insecticide. Synthetic relatives of DDT soon emerged—chlordane, heptachlor, dieldrin and others.

Now, fifty years later, more than two billion pounds of pesticides are used annually on food crops in the United States. Nonbiodegradable residues of these chemicals contaminate our soil, air and water supplies. The party line regarding this is that the EPA (Environmental Protection Agency) monitors levels of toxic chemicals in our food supply and keeps us safe. However, some authorities disagree.

Lawrie Mott and Karen Snyder of the Natural Resources Defense Council cite five reasons why EPA pesticide tolerances (levels of pesticides believed to be safe) may result in dangerous food contamination:

1. In many cases, EPA's tolerances were established without necessary health safety data.
2. The EPA used outdated assumptions of what constitutes an average diet when setting tolerance levels. For instance, avocado consumption is assumed to be no more than 7.5 ounces a year. (Guacamole lovers, take note!)
3. Tolerances are rarely revised when new scientific data regarding risks of a pesticide become available.

4. So-called "inert" ingredients (solvents and stabilizers) in pesticides are not considered in tolerance setting, even though many of them are known to be toxic or carcinogenic.

5. EPA's tolerances allow some carcinogenic pesticide residues in food, even though no "safe" level of exposure is known.

Another pitfall is that violation of EPA tolerances can only be detected through testing by the FDA (Food and Drug Administration), and the FDA's laboratory methods detect less than half the pesticides that may leave residues in food. Also, only about one percent of imported crops are routinely inspected by the FDA. These crops may be the worst in terms of toxic residues due to lack of monitoring of pesticide use in countries of origin.

Last year, the National Academy of Sciences issued the report "Pesticides in the Diets of Infants and Children," which provided evidence that EPA tolerance levels for pesticides residues are not adequate to protect children. New tolerance levels for children are now being determined.

The best way to minimize ingestion of potentially toxic and carcinogenic chemicals in food is to grow your own or buy organically-grown foods.

What about ecological costs of farming with synthetic chemicals? Apart from the issue of toxic residues is the issue of living soil.

"In the United States, with commercial agricultural methods, topsoil is being depleted eight times faster than it is building up naturally."

Chemical agriculture's philosophy is to feed the plants, not the soil. As a result, temporarily high crop yields are obtained at the expense of soil depletion. When concentrated, synthetic N-P-K fertilizers are added to soil, resident microbes are killed. This interferes with the breakdown of organic matter into humus. Less humus means decreased water retention and more erosion of soil. In the United States, with commercial agricultural methods, topsoil is being depleted eight times faster than it is building up naturally.

Organic growers focus on building healthy soil first, knowing that healthy crops will result. Through sustainable methods such as composting, sheet mulching and crop rotation, soil integrity and fertility are preserved and enhanced. Support of organic growers contributes to preservation of farmlands.

The issue of the nutritional value of organically-grown versus conventionally-grown foods has not been resolved. Common sense suggests that food grown in rich, healthy soil without toxic chemicals would be nutritionally superior to that grown in depleted, chemically-contaminated soil. However, scientific studies have not demonstrated this.

A few weeks ago, I did learn of a 1993 study in the *Journal of Applied Nutrition* that suggests organically-grown foods may be higher in mineral content. The author, Bob L. Smith, contends previous studies did not show this because they measured dry ashed mineral concentration, whereas he measured fresh-weight mineral concentration. Smith found the average elemental concentration in organic foods to be about twice that of commercial foods.

Unfortunately, his results are given only in terms of relative percentages—no actual numbers of specimens tested or concentration of elements are stated. Foods analyzed were purchased from stores in the Chicago area over a two-year period, introducing many variables in post-harvest handling. Also, only mineral, trace element and heavy metal concentrations were assessed. No mention is made of vitamin or protein content.

Despite the lack of hard evidence to prove that organically-grown foods are more nutrient-dense, I choose to go by the adage, "You are what you eat." I, personally, would rather be nourished by the fruits of a living, breathing soil than a poisoned, depleted one.

Organically-grown foods require more currency to purchase, but they probably cost less in the long run.

References:

Engelken, Ralph and Rita. *The Art of Natural Farming and Gardening*. Greeley, Iowa: Barrington Hall Press, 1981.

Jeavons, John. *Biointensive Micro-farming—a Seventeenth Year Perspective*. Willits, CA: Ecology Action, 1989.

Lappé, Marc. *Chemical Deception*. San Francisco: Sierra Club Books, 1991.

Lefferts, Lisa Y. "A commonsense approach to pesticides," *Nutrition Action Health Letter* 20(7) 1993: 5-7.

McManus, Reed. "Trusting to luck," *Sierra* 79(1) 1994: 30-36.

Mott, Lawrie, and Karen Snyder. *Pesticide Alert*. San Francisco: Sierra Club Books, 1987.

Smith, Bob L. "Organic foods vs. supermarket foods: element levels," *Journal of Applied Nutrition* 45(1) 1993: 35-39.



Own-Root Roses Again

By C. A. BIRGE, Oklahoma City, Oklahoma

ARE roses grown from cuttings superior to those grown on budded stock? And if so, in what way? And how do you account for it? These are some of the questions asked me by rose-lovers in many and widely scattered places since publication of an article of mine some time ago in which I advocated the growing of roses on their own roots, and also because I discussed the matter at the Knoxville meeting.

When I say that I believe own-root roses superior in most respects to budded roses I am not guessing. This conclusion is derived from more than fifty years of rose-growing, under widely varying conditions of soil and climate and always as an amateur.

My first rose-love was for the wild variety that blooms so plentifully among the Missouri hills. The single flower is a peach-blossom-pink and these are freely produced on plants that throw up long slender canes that remain in bloom for a long time. As an only child on a ranch deep in the heart of these hills I became enamored of this rose at an early age, and it was not until considerably later that I learned there was any other rose.

When I was about ten years old we removed from the primitive conditions in which we lived and settled in a very small village. Here I became acquainted with three or four varieties of bush roses, known only to me then as "red roses," "yellow roses" and "pink roses." A little later in a somewhat larger village I learned of Moss roses, Cabbage roses and Damask roses. Those of you whose memory reaches back as far as mine will fondly recall these old friends.

Most of these old varieties made large clumps the abundant "suckers" of which were easily subdivided and passed around to the various near-by gardens. Then along came a few aristocrats that did not grow so freely nor divide so easily. It was then I learned of the tied-down branch and the inverted glass jar as means of propagation. I have rooted literally thousands of cuttings since those early days, but never have I been able to recapture the thrill of my early successes.

Having made the assertion that I believe own-root roses are better, I will now have something to say as to how they are superior, and will give my own ideas as to why they are better than the budded plants.

Own-root roses are longer lived. I say this without fear of contradiction. Seldom have I been able to retain a budded rose in good condition in my garden for more than five years. The average is four years. I find there is usually a weakness at the bud or point of junction where disease sets in and weakens the rose, destroying its value. It may struggle along for a while, but its usefulness is past and it is best to get rid of it. There is no such danger-point with an own-root rose, which usually, with proper care, will go on growing and blooming for many years, each year bigger and better. I will agree that sometimes a budded rose will appear to take on new life and become rejuvenated, but if examined closely it usually appears that new roots have formed *above the bud* which feed the plant so that what was once a budded rose has now become a plant on its own roots.

Own-root roses are more vigorous and healthy, especially those of the second and third generation. They are thus less susceptible to foliage trouble. As long as you can keep a rose growing it will not black-spot or mildew easily. Indeed I have had rooted cuttings to show such strong and vigorous growth as to far outstrip the parent bush the very first year.

Own-root roses often have better blooming habits than budded roses, showing a tendency to bloom singly on long stems, even though the parent bush bloomed in clusters. With your budded stock, most of the new growth breaks from the bud, while with own-root stock the breaks come from each joint that was buried in the soil. It is usually possible to tell at once from its appearance whether or not a rose is on its own roots.

Believe it or not, own-root roses incline to multiply. If you have buried three joints or buds in the ground, each of those buds should send up a shoot which becomes a part of a clump comprising the whole bush, but in three or four years you will find that each of these shoots has also sent out roots beneath the surface and may easily, in fact should be detached and planted separately thus easily increasing your supply of rooted plants. Last year I had occasion to move a bed of own-root plants and in the end found I had almost three times as many bushes as appeared in the old bed. Perhaps there is nothing remarkable in the way in which these healthy and independent roots do as natural or "wild" roses do.

The roots of budded roses grow but little after they are transplanted into your garden. When the rose has lived its day and is finished and done, the root system appears practically the same as when the rose was planted. How different the case of an own-root rose! Any time after the first year that you dig one up you will find at least two banks of healthy well-distributed roots, all alive and growing.

Now why is all this? Why are the blooms of rooted cuttings often so far superior to the parent bushes that often, unless I had carefully labeled the cuttings, I would not believe they were the same? It is my belief that nature and none other is responsible for these mutations. Nature, realizing that the parent bush was grown under conditions usually entirely different from your own garden, takes the weak little cutting in hand and supplies its deficiencies, fortifying its weaknesses and giving the strength and vigor to survive and prosper in the spot where it has been placed. Of course if your soil has not been properly prepared and does not contain all the elements necessary for growth, this will not be true. I am not arguing for the careless and lazy methods. If the rose-grower plans to be his own nurseryman, he should be willing to take care like the nurseryman does.

To accomplish all this your cuttings must be properly grown. But no elaborate equipment is required. A strong cutting, preferably with a good heel attached, inserted three buds deep in the soil on the north side of a garage, with a Mason fruit jar up-ended over it, stands about as good a chance of survival as any. Personally I prefer a cutting-bed composed of peat-moss and sand, surrounded by a coldframe with a wire cloth cover. I like to start my cuttings in late September or early October. I believe they should be planted early enough to become well calloused before freezing weather. I leave the cuttings in the bed all winter, protecting from freezing with the wire cloth cover. In early spring I lift the cuttings and place them in four-inch pots. The soil in these pots should be well enriched. After potting I keep the plants in the shade for a few days, then expose them to the hottest sun I can find, of course keeping them thoroughly watered during this time. In about four weeks I find the young roots have filled the pots and are bursting out of the bottoms, the pots of course being stood on wet sand. I then lift the plants, soil and all, out of the pots and plant them where they are to remain, in soil that has been well enriched. No special protection is required from this time on, and if you follow this method you will be simply amazed at the way your plants will grow.*

I have come to believe that this potting before planting method is the most important part of the whole scheme. It simply does away with all the shock of moving. But a word of caution, *you must not leave plants in pots long enough to become root-bound.*

I write these words in the secure knowledge that rose-growing is not a rich man's hobby. Roses can be grown almost anywhere, satisfactorily and at little expense. Try to grow a few own-root roses, and if you fail the first time keep on trying. Never let a first failure discourage you. In the end you will be well repaid. As you adventure into some sorts that give you more difficulty, you will just have that much more fun.

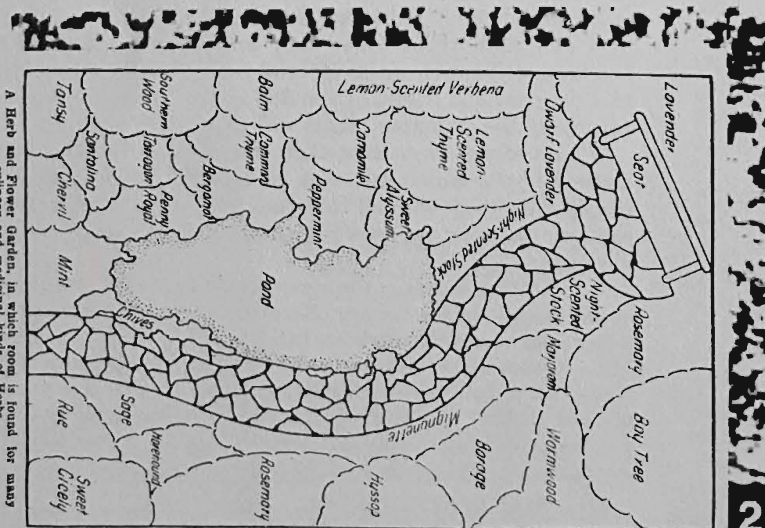
note: This article was written in 1943 before the advent of modern pesticides & fungicides. As an organic rosarian I have very happy customers in Florida & Colorado by giving them OWN-ROOT roses in fertile, living soil. John.

VOWEL MOVEMENTS

- ACHENE**- Simple, dry, one-seeded indehiscent (split-open) fruit, with seed attached to ovary wall at one point only.
- ANTHER**- Pollen-bearing portion of flower stamen.
- BIENNIAL**- Plant which completes its life cycle within 2 years and then dies.
- DECOCTION**- A strong herbal tea, usually medicinal, made by simmering 30 g. dried berries, bark, twigs, or root (or 60 g. of fresh of above) in 750 ml. of water for about 1 hour till decoction reduced to 500 ml.
- GLUCOSIDE**- A botanical substance which on decomposition yields glucose and certain other compounds. Glucosides are very often THE active ingredients in both medicinal AND toxic plants.
- HALOPHYTE**- A plant tolerant of salt.
- HYDROPHYTE**- A plant which lives in water or in very wet soil.
- INFUSION**- An herbal tea made by pouring 500 ml. of boiling water on 30 g. dried herb (or 75 g. fresh herb) then letting steep for 10 minutes prior to straining.
- RACEME**- A cluster of flowers, each flower borne on a short stalk that in turn emanates from a longer central stem; i.e. hyacinths, mustard flowers, grape flowers.
- RHIZOME**- Elongated underground horizontal stem as seen in bearded iris, water lilies, Sansevieria.
- STIPULE**- Leaf-like structures on each side of the base of the leafstalk.
- STOLON**- A stem that grows horizontally along the soil surface.



- TANNINS**- Active plant compounds that react with proteins. Used as astringents and to tan leather.
- TERPENES**- Complex botanical compounds with a carbon ring structure and often quite aromatic, hence their presence in many essential oils.
- TESTA**- The outer coat of the seed.
- TUBER**- Much enlarged, short fleshy underground stem; i.e. the potato.
- VULNERARY**- Refers to herbs used to heal wounds.
- WEI QI**- Concept in Chinese medicine of defense energy, equivalent to the immune system.
- XEROPHYTE**- Plant very resistant to dry conditions and thus thrives in deserts.
- YANG**- Aspect of being equated with male energy- dry, hot, ascending, exterior.
- YIN**- Aspect of being equated with female energy- damp, cold, descending, interior.
- ZIGADENUS**- A member of the lily family preferring bog conditions. Root and the grassy leaves contain poisonous alkaloids. "Death Cama" is a zigadenus species.
- ZINC**- Trace element crucial for healthy plant growth and lacking in many soils. Found in manures, agricultural frit, vetches.



A Herb and Flower Garden, in which room is found for many culinary and medicinal kinds of herbs.

TWIN



Large Rochen Leek (1/2 natural size).





LEEKS



Large Yellow Poitou Leek (1/2 natural size).

LEARNING LEAF ARRANGEMENTS & VEININGS CAN HELP ONE IDENTIFY TREES WHILE HIKING IN THE WOODS OR WALKING DOWN THE STREET.



ARRANGEMENT.—There are several different ways in which leaves are arranged on trees; the most common plan is the *alternate*;  in this only one leaf occurs at a joint or node on the stem. The next in frequency is the *opposite*,  where two leaves opposite each other are found at the node. A very rare arrangement among trees, though common in other plants, is the *whorled*,  where more than two leaves, regularly arranged around the stem, are found at the node. When a number of leaves are bundled together,—a plan not rare among evergreens,—they are said to be *fasciculated* or in *fascicles*.  The term *scattered* is used where alternate leaves are crowded on the stem. This plan is also common among evergreens.

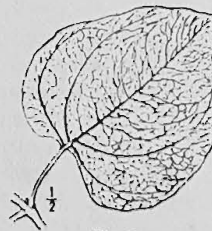


Fig. 8.

VEINING.—The leaves of most trees have a distinct framework, the central line of which is called a *midrib*; sometimes the leaf has several other lines about as thick as the midrib, which are called *ribs*; the lines next in size, including all that are especially distinct, are called *veins*, the most minute ones being called *veinlets* (Fig. 8).

COMPANION

There is a haunting
in every heart,
the sad ghost of a child long lost
in the dark hallways of our memory....

he cannot frighten us if we lead him out by the hand.

There is a fossil
in every heart,
the cold bones of old forgotten pains
deep in the stone of us...

they cannot imprison us if we free them, one by one.

There is a child
in every heart,
tearful and afraid and lonely,
hungry to be held but
hiding behind our skillful adult composure...

he cannot rule us if we find him then
let him feel loved.

There is a joy
in every heart,
like an ancient insect
caught in a cruel amber....

it cannot lift us unless we set it free.

"I feel like I know her but sometimes my arms bend back".
Laura Palmer (?) or her double(?)



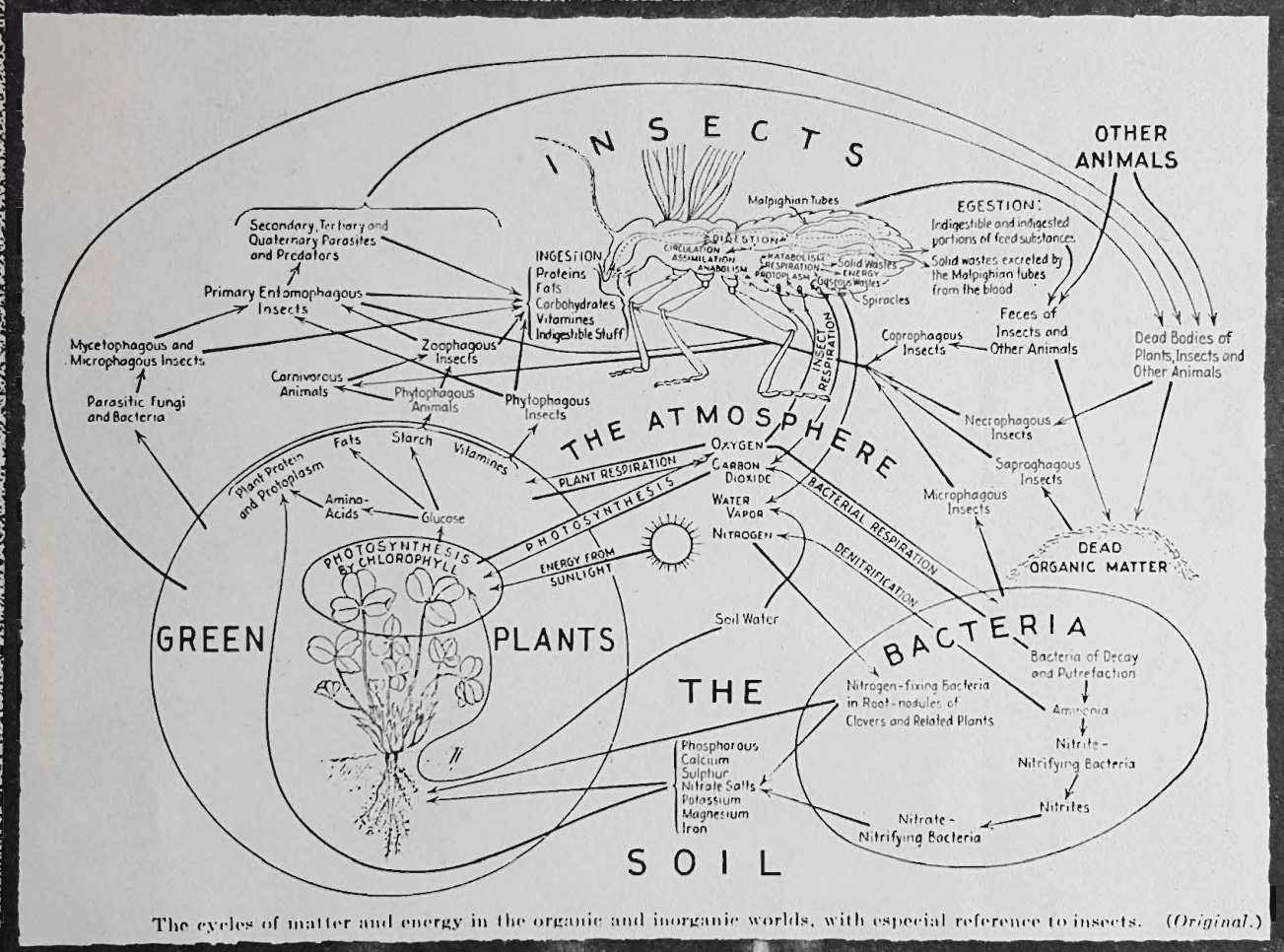
BUCKBEAN (*Menyanthes trifoliata*)

N

ative to boggy regions in North America (Canada to Virginia) and Europe, this attractive perennial is known by several names: Marsh Trefoil, Bogebean, Bog Bean and Water Shamrock. Emanating from a dark, finger-thick, long, round, jointed, branched and horizontal rhizome, the leaf stalks are smooth with sheathing stipules at their bases. Three bright green smooth oval leaflets are grouped into one leaf at each stalk's tip. The flower stalk emerges in May and grows to a height of 6"-12", bearing a conical raceme of pale pink funnel-shaped flowers containing red pollen-bearing anthers. The flowers mature into 2-valved, 1-celled capsules filled with many seeds.

All parts of the Buck Bean are medicinal, being rich in a number of bitter compounds, including the bitter glucoside "menyanthin", hence Buck Bean's use as a tea substitute and as a flavoring agent in Scandinavian beer. The foliage contains several bitter alkaloids, especially gentianadine (which in animals lowers blood pressure and soothes inflammation) and gentianine (which acts as an analgesic and mild tranquilizer). So esteemed in Europe as to be regarded nearly as a panacea in some countries, this herb has long been used there, in varying strengths and dosages, as a bitter tonic, cathartic, purgative, and emetic. The tea has also been used to treat fever, skin diseases, rheumatism, scabies, catarrh, dropsy and stomach gas and excess acidity.

The medicinal tea is made by simmering 1 teaspoon of finely chopped leaves and rhizomes and roots in 1 cup water for a few minutes, then straining. The tea is drunk cold, one mouthful at a time, throughout the course of the day.



"The most important part of man's existence, that part where he most truly lives and is aware of living, lies entirely within the domain of personal feeling." Joyce Cary 1888-1957



Natural range of Indian Rice Grass (Oryzopsis hymenoides)



"Those ZESTY pesticide residues add ZIP to OUR meals! POOH to that silly organic food! Anybody for seconds?"

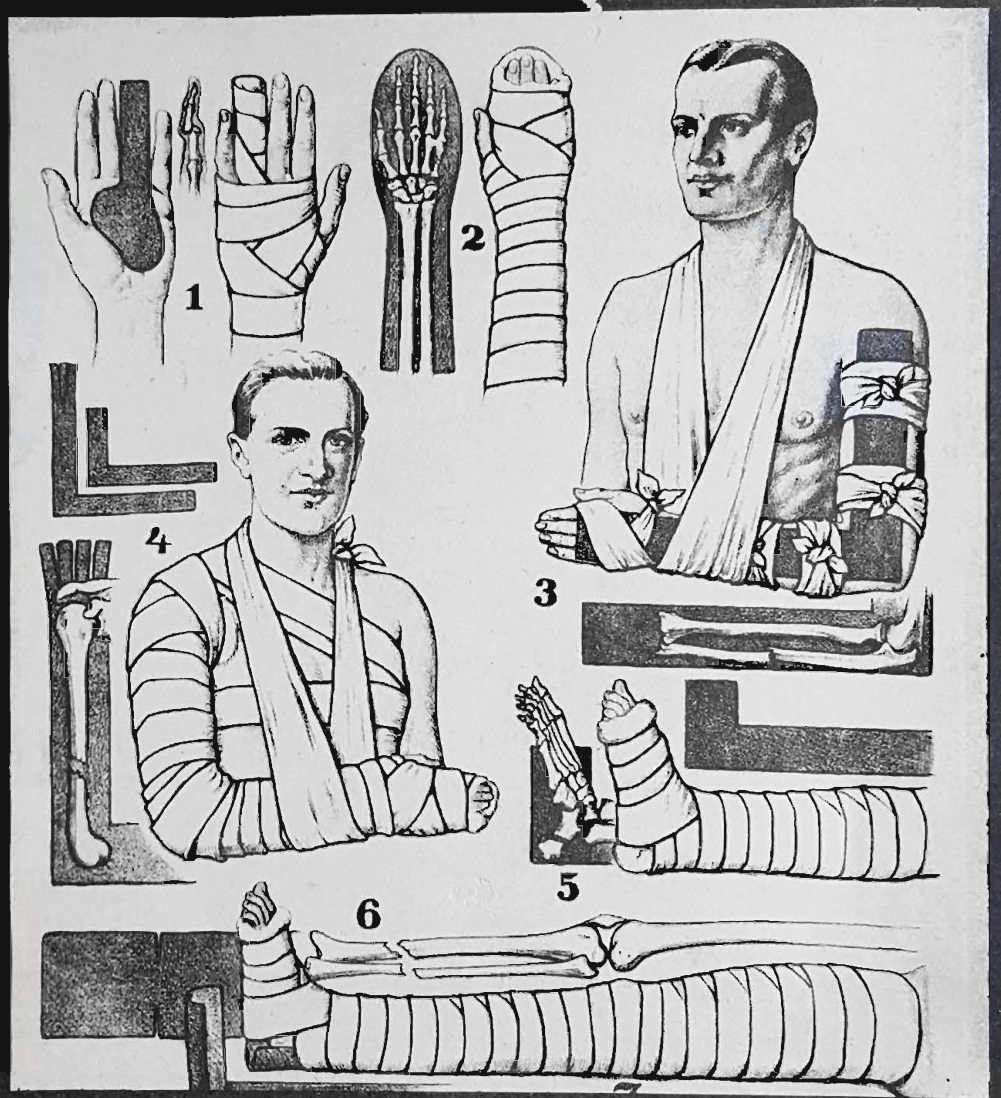
QUESTION AUTHORITY

"Last night I discovered a new form of oral contraceptive. I asked a girl to go to bed with me and she said no." Woody Allen

"Life is like a deck of cards. The hand that is dealt you represents determinism; the way you play it is free will." Jawaharlal Nehru 1889-1964

"Feminism is the radical notion that women are people."

Cheris Kramarae
Paula Treichler



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