

THE
GARDEN



Hordeum distichum

DOCTOR

No. 4 SEPTEMBER 88



elcome to the fourth issue of "The Garden Doctor"...it's a real adventure creating this publication,so thanks for joining me by subscribing,and thanks for the letters and even phone calls of support, especially following the June issue.Christopher Rinn,Ann Kaiser,Valerie Sampson and many others took the time to say "job well done!"...I needed that.A particularly thoughtful letter from Jaclyn Fuller Lane of Albuquerque,New Mexico encouraged me but suggested I diminish the "60's style politics" and credit federal gov't for more than tax collection and street repair if I wished to gain a broad gardening readership.Her kind letter served as a catalyst for me to share with you why I work so hard on "The Garden Doctor".

There's a need for it.Lot's of tame "gardening publications" hope for a huge readership,so they take few chances,stay away from risky opinions, offer little astringent humor.None I know of supply their readers with actual samples,only page after page of the paid advertising that is conspicuously absent from "The Garden Doctor".I aspire for a readership of only 5,000 right-brained souls like myself...I know we're out there, people who can't compartmentalize the spirit of organic gardening from a free-thinking awareness of political responsibility,people who see the usefulness of irreverent 60's style jabs at authority figures with little sensitivity for the planet or the creatures on it,humans included.Jabs are due those folks who waste or rip off billions of the tax dollars originally wrested from us to create or maintain a common good.They should be composted.In a decade this conservative a dash of adolescent rebellion can discourage fatalism,nihilism and ennui.The mindset that resists pesticides in food and groundwater,species abuse and extinction, degradation of soil,atmosphere and wildlife habitat is linked to the Garden,and sees little difference between napalm and diazinon,deadly liquids designed only to kill,whether in the hands of U.S. and Soviet sponsored petty dictators or hard-working but uninformed farmers.

It is for "us" that I create "The Garden Doctor",sort of a hybrid of Rodale's "Organic Gardening", The Wall Street Journal and Monty Python's Flying Circus,fertilized with the good creative energy of e.e. cummings,Marcel Duchamp,The Three Stooges,Laslo Moholy-Nagy,The Rocky Horror Picture Show,Phil Silvers,Ruth Stout,Yoko Ono (who I met in June!), "Green Acres",Man Ray,Hermann Hesse,Sally Newkirk,Steve Hodge and all the other neat people I encounter while walking about the planet each day.It's hand-colored and hand-signed because I'm an artist and wish to balance the glossy technology that creates the black and white basis of each page.Hencethe motto for "The Garden Doctor" remains:

"A Suppository for the Mind in a Decade constipated by right-wing reactionism".

Thanks Jaclyn,for your support,and for prompting from me this overdue bit of sharing.

Sincerely,

John Starnes



Good News



Several million signatures have been gathered worldwide to declare Antarctica a World Park in 1991 when current international treaties determining its use expire.

Paul Muller, his wife and just two helpers maintain the commercially successful 100 acre "Full Belly Farm" in California using completely organic methods.

The U.S. Bureau of Mines in Pennsylvania is now planting cattail marshes around strip mines to absorb the toxic metals released into the water by acid mine runoff; for years they used extensive, EXPENSIVE chemical applications instead of the earth's natural healing method they now employ. I think they are to be commended.

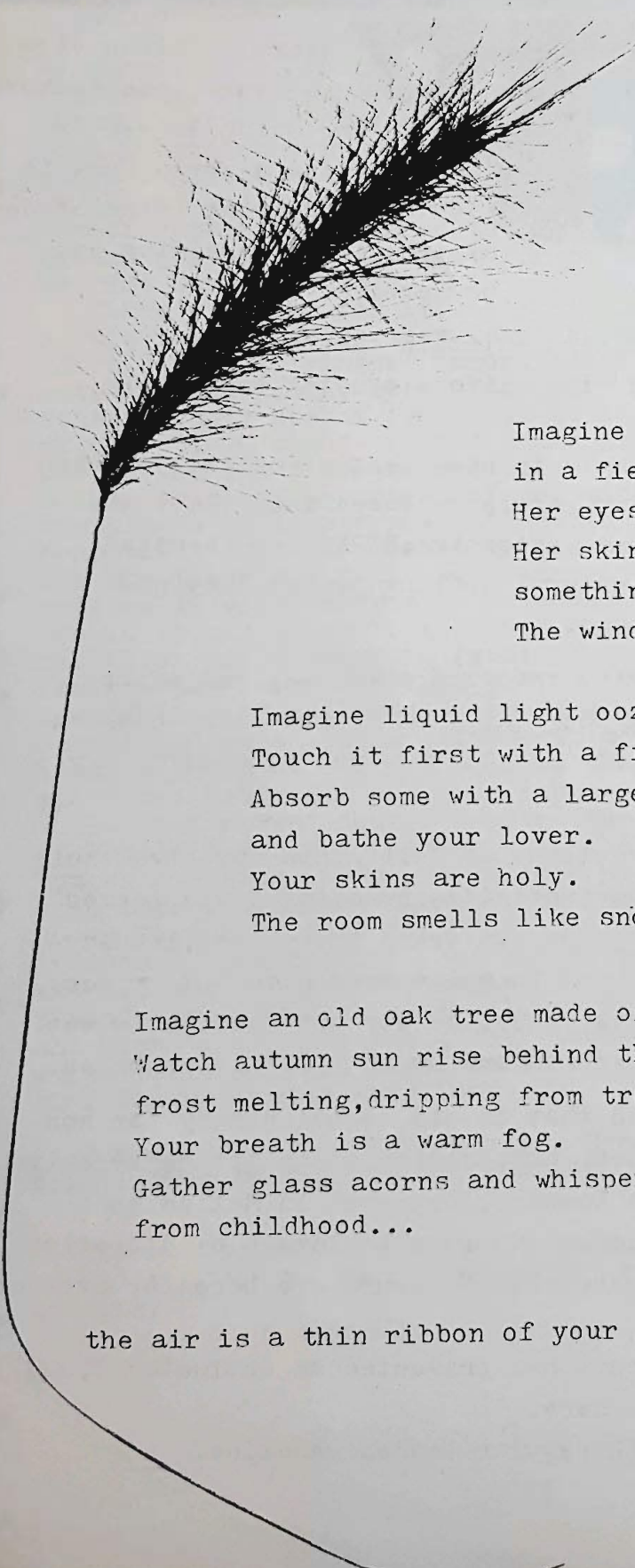
Holy Shit Batman!...Philadelphia, having enforced pre-treatment of its huge output of sewage, is now selling CHEMICAL FREE "Earth-Life" compost on a commercial scale, and also uses it to heal the land scarred by strip mining! Waste not, want not.

Progressive grape growers in foggy sections of California now have their workers, instead of spraying dangerous fungicides, removing grape leaves shading young fruit clusters...the rising sun dries the grapes, leaving them fungus-free...it turns out that the fungal spores need WET grapes to germinate and grow. The growers save money, the workers' health is not compromised, and healthy, poison-free grapes end up in kids' lunch boxes.

Researchers in Mexico have determined that an old herbal remedy for non-insulin-dependent diabetes really does work. Broiled stems of the prickly pear cactus sp. *Opuntia Steptacantha* Lemaire, long used in Mexico as a vegetable, lowered both the blood glucose AND insulin levels of diabetics in controlled experiments...how many "useless" plants are becoming extinct each day?

The use of catalytic converters on cars has prevented an estimated 2,000 TONS of lead from entering the atmosphere.

West Germany will soon be banning ALL regular leaded gasoline.



Future Moods

Imagine a blind princess standing alone
in a field of snow.

Her eyes are made of ice.

Her skin is warm and white...she whispers
something remembered from childhood.

The wind is clear spruce and pine.

Imagine liquid light oozing beneath your bedroom door.

Touch it first with a finger and then your tongue.

Absorb some with a large, soft sponge
and bathe your lover.

Your skins are holy.

The room smells like snow.

Imagine an old oak tree made of glass.

Watch autumn sun rise behind thick, clear trunk,
frost melting, dripping from transparent leaves.

Your breath is a warm fog.

Gather glass acorns and whisper something remembered
from childhood...

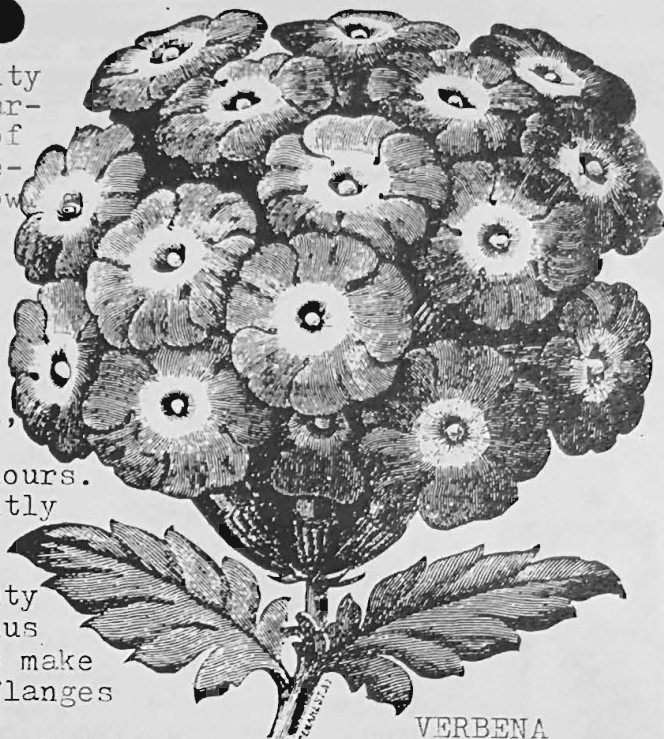
the air is a thin ribbon of your grandmother's perfume.

J.S. September 1985

Do you know
the secret...

to good productivity
in a first year garden?...a program of
rapid soil improvement. And the follow-
-ing steps can
make it happen:

1. Cover the mowed garden site, weeds & all, with 2" of dry leaves, grass clippings, etc.
2. Sprinkle it HEAVILY with cottonseed meal, meat-and-bone meal, soy meal or fish meal; all can be gotten at feed stores. Water 2 hours.
3. If you live East of the Mississippi, lightly sprinkle dolomitic limestone to combat acidity and supply calcium and magnesium.
4. Turn (not rototill) the soil with a pointy tipped shovel, inverting each shovelfull, thus burying the weeds, mulches and nutrients. To make penetrating the soil easier, stand on the flanges



VERBENA



THE LONG-FLOWERED LILY—*Lilium longiflorum*.

- of the shovel.
5. Rake the soil smooth, apply 6" of GREEN grass clippings, then water for 4 hours using an oscillating sprinkler.
6. In two weeks, part the mulch as you would hair to expose the soil, then plant your seeds or seedlings.
7. Water 20 minutes DAILY till the seedlings are 2" high; water for 1 hour every 5 days thereafter.
8. Monthly feedings of fish emulsion or ruke juice will boost growth greatly.
9. Continue adding leaves, grass clippings and hedge trimmings to the soil between the plants...you are never through mulching, as it is always decaying away.
10. At the end of your first growing season, invert the soil once more, mulch, roots, and all. Repeat above steps.



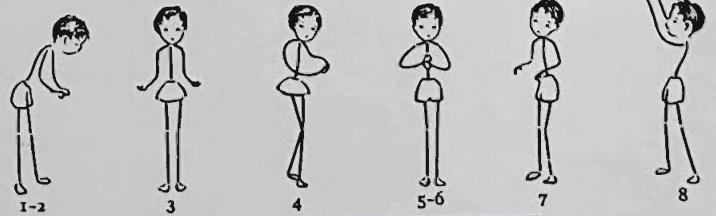
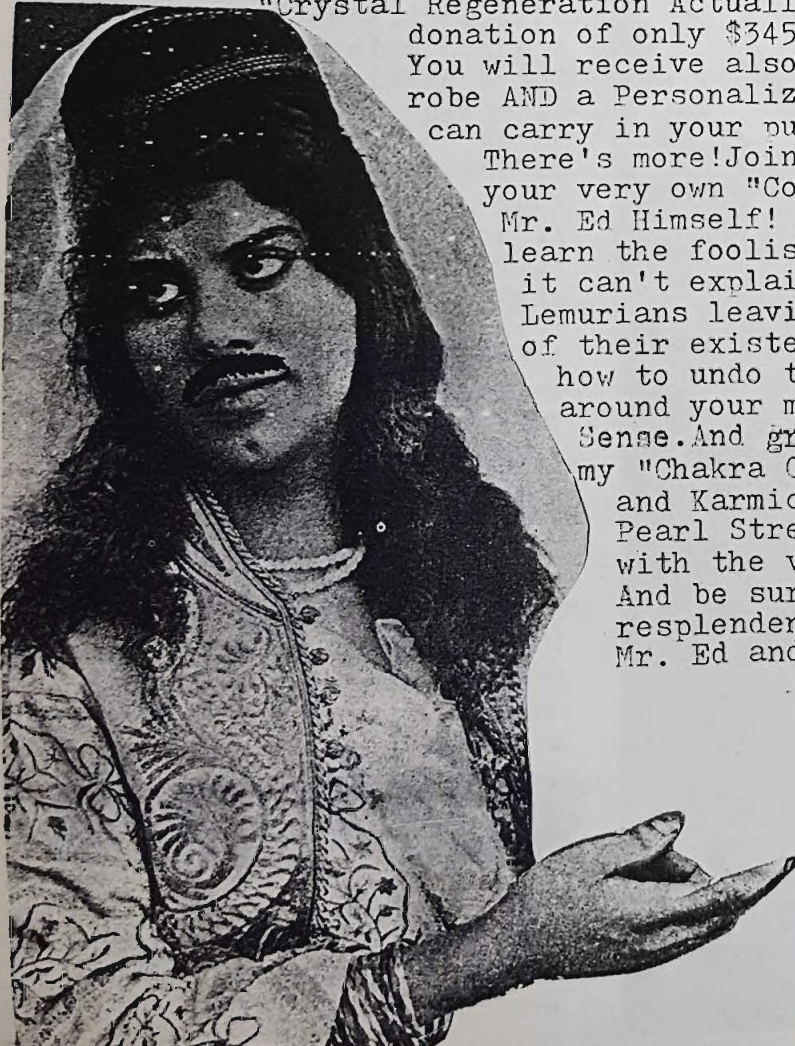
Many gardeners, myself included, cease turning their soil after the 2nd season.



A New Age sparkles around us, and I see an orgone energy vortex allowing some of us to see Wondrous Things. I, Kashrami S.O. Terika, can tell you now that Mr. Ed has reincarnated in my garage, but you can see him only if you wear the proper crystal over the proper chakra; I will then determine if your sensitivity is sufficient. However, doubt-filled, testosterone-poisoned Male Modern Scientists foolishly insist that I provide what they call rational, empirical evidence of Mr. Ed's miraculous re-appearance... photographs, hair samples or tape recordings of my Sacred Communications with Him, during which He channels to me the True Science of the Lemurians; levitation, out-of-body shopping, and Immortality. But they demand to SEE him, trusting rudimentary sight organs over Intuition. This male-pig urge of theirs to thrust their so-called Scientific Method like a soiled penis into the clean womb of Wholistic Truth reveals the depth of their blindness. Ignore them.

For I, Kashrami S.O. Terika, after years of fasting, meditation, and sleeping on a Posture-Pedic filled with quartz crystals, have Focused and Balanced my Karma, enabling me alone to admit pilgrims through the Spiritual Sphincter skeptics label a Sears garage door opener, behind which, before His Appearance, I defiled His future temple by parking the harshly angular male-designed GM Cadillac De Ville I unknowingly drove then. (Now fully Purified, I drive a rounded, Feminine Energy BMW). Unfettered by Modern Science's Venus Envy, I accept Mr. Ed's gracious gift of knowing that soon Mt. Evans will emit a glorious Blue Light (for those who Truly See) as the UFO colony beneath Boulder, Colorado rises to announce, to reveal the New Age. To help you prepare for this Day, I, Kashrami S.O. Terika will teach you Mr. Ed's patented "Crystal Regeneration Actualization Process" for a modest

donation of only \$345 (MasterCard and Visa accepted). You will receive also a complimentary saffron-colored robe AND a Personalized Orgone Ozone Purifier that you can carry in your purse or glove compartment. But WAIT! There's more! Join now and receive ABSOLUTELY FREE your very own "Convergence Harmonica", initialed by Mr. Ed Himself! Attend my C.R.A.P. Seminar and learn the foolish limits of Scientific Method, why it can't explain the perfect wisdom of the Ancient Lemurians leaving ABSOLUTELY NO TRACE WHATSOEVER of their existence 65 million years ago. Learn how to undo the chains that college wrapped around your mind: Logic, Sensory Data and Common Sense. And graduates will be eligible to join my "Chakra Cha-Cha and Colonic Herbal Shampoo and Karmic Massage Therapy Clinic" on the Pearl Street Mall in downtown Boulder, alive with the vibrations of the Energy Vortex! And be sure to order my new video, the visually-resplendent "Boyonahotseat: Life on a Valance". Mr. Ed and I wait for your call.



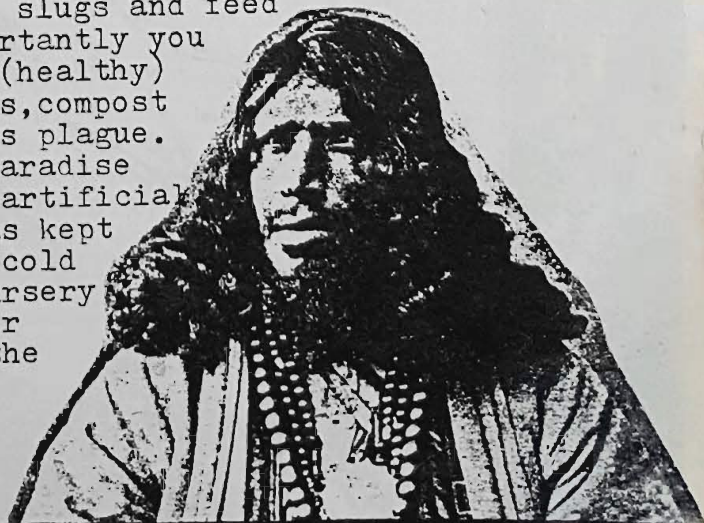
THE CHAKRA CHA-CHA

Ah, Grasshoppers, once again the tides of time bring us together, once again we will share the light of knowledge; today I speak of pest control in greenhouses. The friendly folk at Elliott's Wholesale Nursery in Thonotosassa, Florida tell me they only wish they could maintain their huge greenhouses organically, for they too understand that the earth is wounded. They face a special challenge, for in the confines of a greenhouse pest creatures may wreak havoc if poisons have killed off the predatory creatures that, in the garden, keep herbaceous creatures under control. A primary rule of nature is this: Destroy an animal community and it will ALWAYS be the plant eaters that return first, as plants are the first link in the food chain. Thus in a greenhouse maintained by poisons the seeming necessity for further spraying never seems to end, since predators, always the SECOND group of creatures to reclaim an area, never get a chance to increase in number sufficiently to control the plant eaters. So the cycle of poisoning continues. But take heart, my little nymphs, for today I will show you another way.

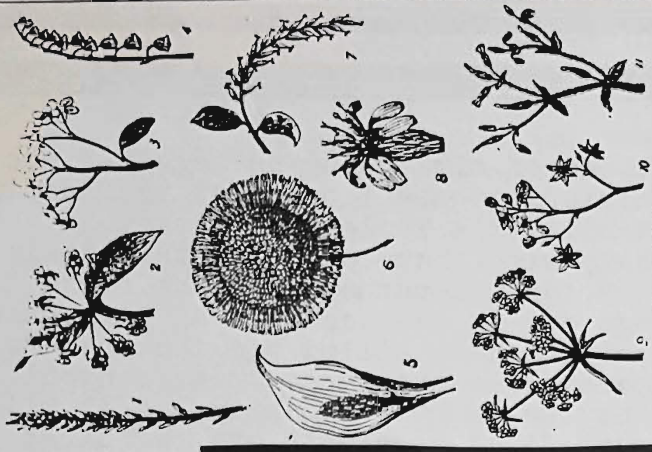
Think of each greenhouse as a biological world under your care. If you lived in a moonbase and that greenhouse was your sole source of food, oxygen and CO₂ removal, you would not dare spray poisons in there. Instead you would import from earth the widest possible variety of beneficial insects, fungi, bacteria, mites and vertebrates in an effort to duplicate the checks and balances that have maintained the Earth for so long. You would first create a safe haven for these creatures in the center of the greenhouse, a natural garden of perennials and annuals of at least 100 square feet. It would contain a pond, even if only a kiddie pool sunk into the soil. This central nature preserve would be stocked with many species of spiders, predatory mites, lady bugs, lace wings, ant lions, wasps, (especially trichogramma wasps), goldfish, frogs, toads, lizards, praying mantis, birds, parasitic nematodes and robber flies. You would introduce to the entire lifespace beneficial micro-organisms like Bacillus Thuringiensis and Nosema Locustae for keeping caterpillars and grasshoppers in check. And of course you would introduce "plant pests" to feed all these natural allies. You would tolerate SOME leaf damage, SOME losses, but you would have a self-maintaining lifespace. For emergency pest infestations not being controlled adequately by natural balance, you would use local sprayings of true soap in solution (1 bar of castile soap ground up and dissolved in about 5 gallons of hot water) to control spider mites and leaf fungi (castile soap is alkaline, leaf fungi need a slightly ACIDIC leaf surface). You would use plant-derived insecticides like rotenone or pyrethrum to control local outbreaks of plant pests, being sure to avoid killing your beneficial creatures. You would hand pick slugs and feed them to the fish and ducks. But most importantly you would keep your plants attack-resistant (healthy) by feeding them fish emulsion, manure teas, compost tea... natural, COMPLETE nutrition prevents plague. You would have made a Garden of Eden, a Paradise Found, knowing that even one spraying of artificial poisons will destroy the balance that has kept your native earth a living jewel in the cold void. Perhaps soon Elliott's Wholesale Nursery will be an island of life inspiring their customers to a gentler, wiser vision of the marketplace and our world.

Cosmically Yours,

Chloro Phil



In-flor-escence (in-flō-res'ens), *n.* [*N.L.* *inflorescentia*, < *I.L.* *inflorescere*, come into flower, < *I.* *in*, in, + *florescere*, to flower: see *flor-escence*.] A flowering or blossoming; in *bot.*, the arrangement of flowers on the axis; the method of development of flowers; also, the flowering part of a plant; a flower cluster.



Forms of Inflorescence.
 1, spike (plantain, *Plantago*); 2, simple umbel (milkweed, *Asclepias*); 3, corymb (chokerry, *Aronia*); 4, raceme (catalpa, *Catalpa*); 5, flower head (burr-on-bush, *Cephalopetalum*); 6, female catkin (willow, *Salix*); 7, anthodium (goldenrod, *Solidago*); 8, compound umbel (water-parasit, *Sium*); 9, panicle (blue cobnash, *Cassipoulium*); 10, cyme (a chick-weed, *Cerastium*); 11, spike.

hemp (hemp), *n.* [*AS.* *henep*, *hænep*, = *D.* *henep* = *G.* *hanj* = *Icel.* *hampr*, hemp; akin to *Gr.* *κάνναβις*, *L.* *cannabis*.] A tall, annual moraceous herb, *Cannabis sativa*. Native in Asia, but cultivated in many parts of the world (see *carl-hemp* and *finble*); the tough fiber of this plant, used for making coarse fabrics, ropes, etc.; also, a narcotic drug obtained from the Indian hemp (see below); also, any of various fibers similar to that of hemp (cf. *manila*, also *Sisal hemp*); also, a hangman's rope. — **Indian hemp**, an East Indian variety, *Cannabis sativa indica* (or *Cannabis indica*), of common hemp, having narcotic and poisonous properties and yielding hashish, bang, cannabin, etc.; also, a North American apocynaceous herb, *Apocynum cannabinum*, yielding a strong fiber, which was used by American Indians for making nets (also called *Canadian*, or *Canada*, hemp).



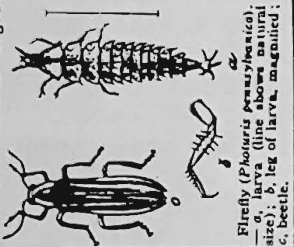
Male (1) and Female (2) Plants of Hemp (*Cannabis sativa*). — a, male flower; b, female flower; c, embryo.

Things to Think About

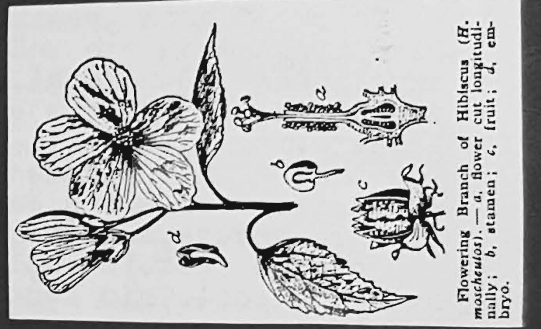


Slicking down the hair is a sure sign of active interest in the opposite sex.

Any of various winged insects, esp. beetles of the genera *Photinus* and *Photuris*, having light-producing organs.

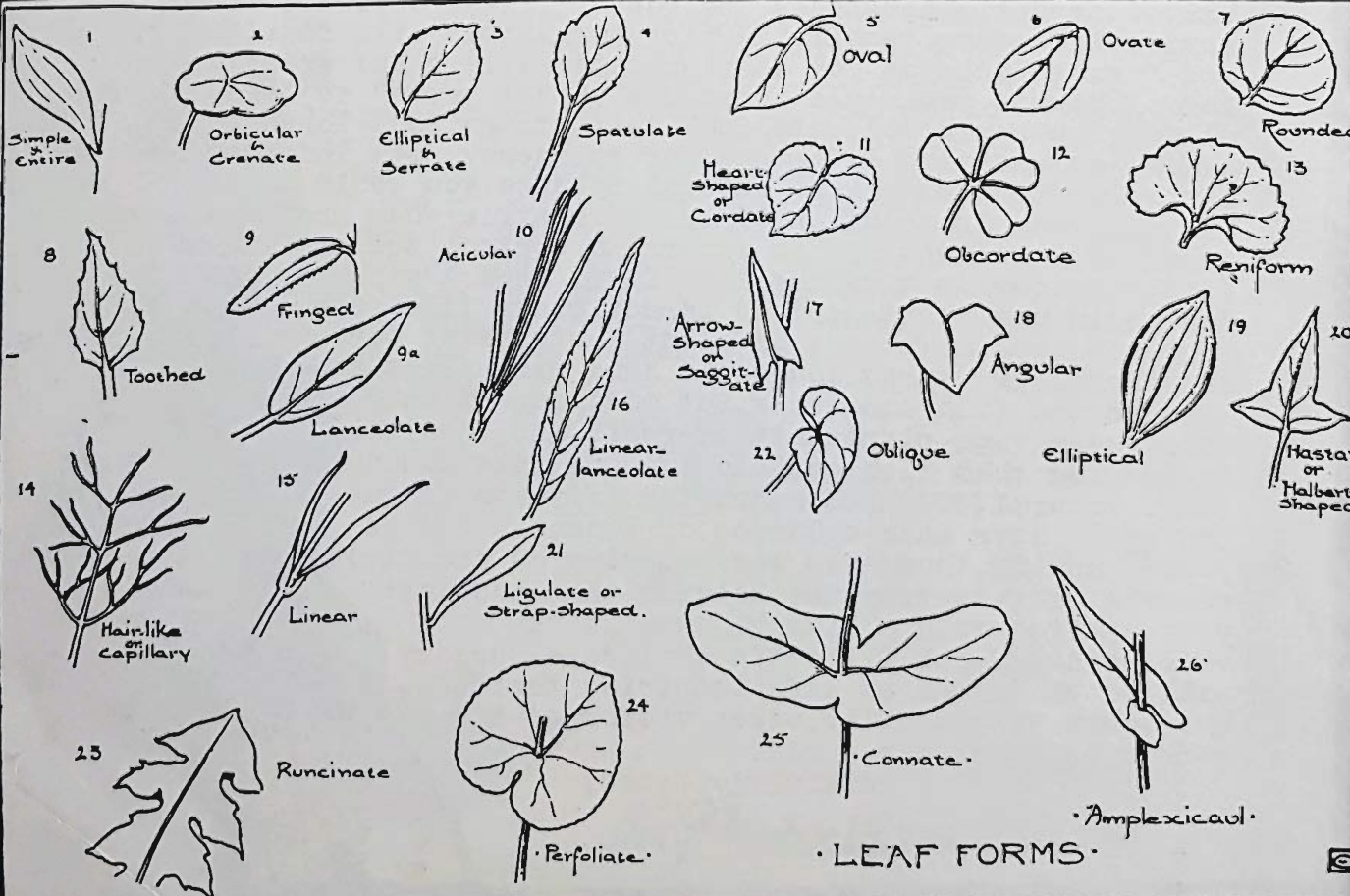


Firefly (*Photuris pennsylvanica*), larva (line shows natural size); leg of larva, magnified; c, beetle.



Flowering Branch of Hibiscus (*H. moscheutos*). — a, flower cut longitudinally; b, stamen; c, fruit; d, embryo.

fire-fly (fir'li), *n.*; pl. *flies* (-litz). Insects, esp. beetles of the genera *Photinus* and *Photuris*, having light-producing organs.



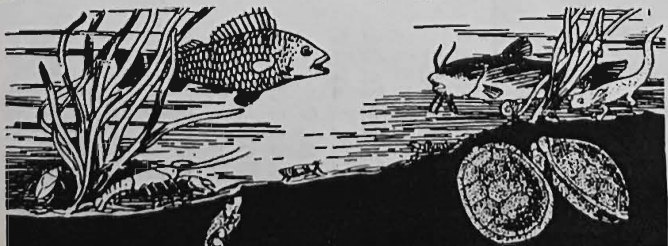
• LEAF FORMS •





Autumn, even in Florida, S.W. Texas, S. California and S. Arizona is a time of lengthening shadows, slowing growth and final ripening as birds, insects, mammals, reptiles and amphibians store food for winter or migrate or hibernate. For northern gardeners it is a last chance to grow quick crops like radish or lettuce, or to plant the hardy bulbs like tulips, daffodils, fritillaria or hyacinth. Garlic performs best if fall planted. BEFORE the first frost they should harvest pumpkins and remaining squashes, and pull up tomato and pepper plants to hang upside down in a cool room for those last fruits to ripen. AFTER the first frost lift cannas, glads, tuberous begonias, dahlias, ismenes, crinums and other tender bulbous plants. Store them in damp sawdust or sand in the cellar or a cool closet. Gather many, many bags of leaves that people set out on garbage day and use them to add a 2 inch layer of organic matter on all your beds. After the first hard frost apply a 12" to 24" layer of leaves to root crop beds: even in January the soil beneath will remain soft and yield carrots, beets, Jerusalem artichokes and even kale, collards and cabbage. Early autumn is also a good time to plant containerized trees and shrubs, and to divide and replant perennials like shasta daisy, physostegia, delphinium and perennial phlox. Re-seed old lawns with water-conserving native grasses like crested wheatgrass so that the seeds can sprout in cool autumn or spring...water daily for 1 hour for 2 weeks. BEFORE the first freeze dig up and pot up broccoli and collard plants and grow them in a sunny south or east window for fresh winter greens. Put all frost-killed plants in the compost and feed the ENTIRE soil mass around your home with either fish emulsion, manure or meat-and-bone meal...by spring your soil will be re-nourished and ready to foster the growth of plants and beneficial soil organisms. Set out bird feeders and buy cheap 50 pound bags of "chick scratch" at feed stores...these feathered descendents of the dinosaurs will reward you for feeding them in winter by returning in summer to eat weed seeds and herbivorous insects. Pot up garden geraniums for a burst of color in snowy January windows. Can and freeze and dry produce like crazy...a house full of food is good for the soul AND body.

Autumn in Florida and other mild-winter areas is planting time for containerized HARDY shrubs and trees, time to buy and broadcast winter rye grass seed to green up dormant St. Augustine, centipede or Bermuda lawns. Gather up and fold flat several big cardboard boxes and store them away...when a bad cold front approaches unfold them, invert them over tender tropicals, put bricks on the flaps to secure them...a votive candle inside the box will protect plants during record-breaking freezes, like in 1983. Feed your ENTIRE soil mass with either fish emulsion, cottonseed meal, meat-and-bone meal or chicken shit. Mulch your ornamental beds and gardens with a few inches of leaves and grass clippings. Dust acid soils lightly with dolomite rock powder unless meat-and-bone meal was your nutrient of choice...the calcium in the bone meal will neutralize acidity. Now you're ready to plant your reward for living in a snow-free mild winter area...winter vegetables and annuals. And the next two pages will help you choose which, and how, and when.



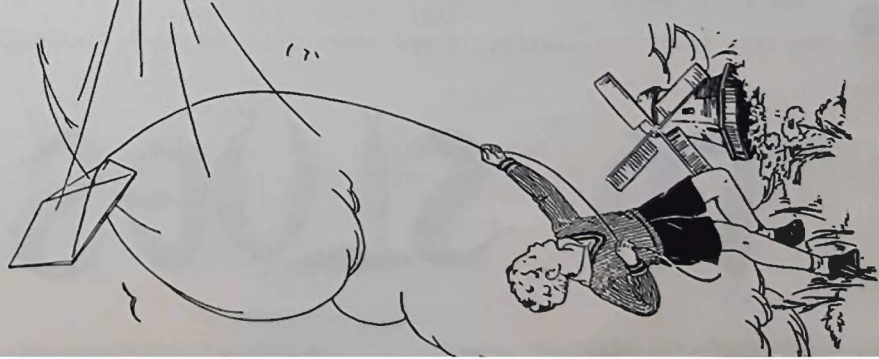
ANNUAL FLOWERS

Shirley Poppies
 Sweet Peas
 California Poppies
 Snapdragons-buy 6 packs
 Petunias
 *Larkspur
 Sweet Alyssum
 Pansies-buy 6 packs
 Calendulas
 Stocks
 Dianthus
 Ornamental Cabbage, Kale
 Phlox
 Blue Salvia (Victoria or
 Blue Bedder)
 Gypsophillia
 Ruby Chard
 Hollyhocks

Hardy annuals are perfect for fall and winter use in mild-winter areas because not only do they prefer cool weather, they tolerate light frosts, provided temperatures do not fall below the upper 20's. So mild-winter gardeners can plant them October through January, whereas the rest of us must wait for spring, say April or May. To prepare the bed, turn plenty of organic matter into the top few inches of soil, as seeds need a loose, rich medium to sprout in. Plant large seeds, like sweet peas, by hand, covering the seed with soil twice the thickness of the seed's widest diameter. So a $\frac{1}{2}$ " diameter sweet pea seed will be beneath $\frac{1}{2}$ " of soil. Tiny seeds like those of sweet alyssum or Shirley Poppies may be lightly raked in. Sprinkle a $\frac{1}{2}$ " light layer of grass clippings over the ENTIRE BED to keep the soil cool and moist. WATER FOR 2 WEEKS! An oscillating sprinkler makes this easy. Letting the soil dry out is THE biggest cause of failure when growing seeds. When the seedlings are 2" tall water weekly, mulch between them with 4" of grass clippings. Take bouquets to keep them blooming. Chill your seeds in the fridge for a week before planting.



Tiger Swallowtail
(Papilio tatarus)



JUST SAY NO

I'm sure that in her beautifully complex wisdom Nature intended a place and purpose in the Universe for slugs, but surely not in MY garden. A few of these shell-less mollusks I can live with, but slimy hordes, no way Hozay. So here now are my results after trying several methods for controlling these hungry living boogers:

1. Mint, applied dried and crushed or as fresh boughs had no repelling effect. In fact, the slugs relished the mint leaves, no doubt as an after dinner mint having dined thoroughly on my annual seedlings.
2. Castile Soap spray-Suggested by Vi Stoughton of Denver who also supplied the "Mystery Vegetable" seeds in issue no. 2 (turns out it's a chenopodium, like chard or spinach). Anyway, a solution of Castile Soap no matter how strong, neither killed or repelled.
3. Garlic-Seemed like a waste, but a clove of garlic buzzed with a quart of water on high speed in a blender then splashed liberally on the lawn and specimen plants repelled them for DAYS.
4. Beer-Well, this famous one often works but it's gross and tedious pouring beer into and dead slugs out of all those jar lids. Besides, I deserve beer far more than do my slugs.
5. Larkspur seed-pulverized with water in a blender then blended with dry oatmeal these highly toxic seeds attracted HERDS of slugs but didn't even slow them down. Three slugs held captive in a jar ate this poisonous porridge for two weeks without batting an eye-stalk.
6. Hand-picking: Still the most reliable method, though bad on the back. I gathered a staggering $1\frac{1}{2}$ GALLONS of slugs by hand-picking at dusk or at night with a flashlight. Tired of wasting water by flushing them down the toilet, I tossed them into the puke juice barrel. There they die quickly and their protein-rich bodies decompose in the horrific smelling vile liquid to which they add a good bit of nitrogen. Hey, fukum if they can't take a joke.
7. Vinegar-This one is the "piece of resistance", for in a spray bottle vinegar easily and quickly KILLS them! First they turn white, writhe in obvious agony briefly then die and shrivel up...kay sarah sarah. Straight vinegar can burn leaves, so try cutting it with an equal amount of water.

Now it's your turn...write in and share your personal slug safaris.

TO SLUGS!

Entrepreneur

Hire a bulldozer
to scrape the reflections off a mountain lake
and load them into a dumptruck.

Drive to a flea market and
using a large shiny knife
cut them into scarves.

Sell them for what the market will bear.

J.S. 88

Gallery

Use a chainsaw
to cut a wide path through a shallow river.

Use a mop to dry the bottom.
Discard any fish you find.

Hang posters of Andy Warhol
on the watery walls and

on opening night
distribute flashlights to patrons and critics.

J.S. 88

Hard

Hire a beautifully muscled
bare-chested man
to use his jack hammer
to shatter dragonfly wings covering a floor.

See the luminescent fragments
fly up then flutter down and stick
to his sweaty arms,
his broad, tanned shoulders shuddering
above the jack hammer.
See his green eyes glimmering above
his handsome mouth, the tip of his tongue
damp and warm between white teeth.

And when he turns off the jack hammer,
there is only the sound of
broken dragonfly wings
settling to the floor.

J.S. 88

I pay a staggering \$5 for each poem I publish, my own
excepted. I'm far too busy to return submitted poems,
but if that doesn't bother you feel free to submit.

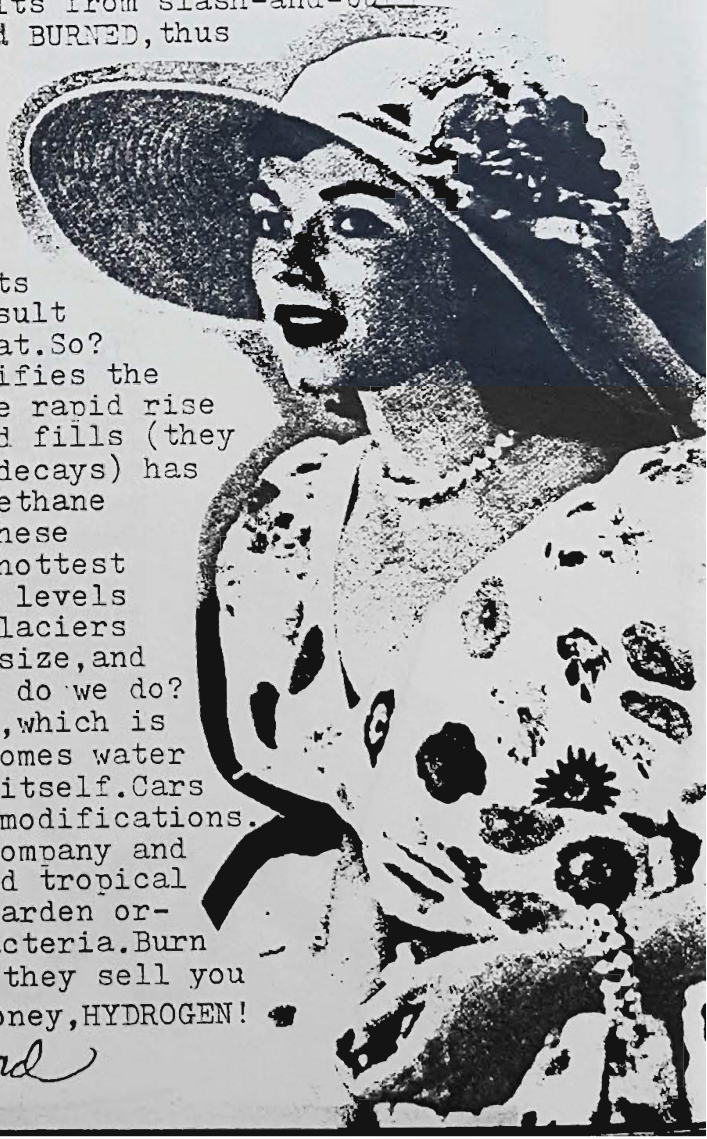
Well huns, no tongue-in-cheek political bitchery this time...I'm worried, many of you are worried, and scientists around the world are worried. Trouble is, industrial and political leaders don't seem to be. Worried about what?

CO₂ pollution of the thin film of gases hugging this ball of rock and water we call home...the Greenhouse Effect. The drought of 1983 is being directly attributed to the documented global warming caused by our species' burning the coal, oil and gas that millions of years ago was atmospheric carbon. Fossils prove that in those days the earth was a global greenhouse, with huge ferns growing at the now icy poles. Carbon dioxide, like the glass of a greenhouse, admits energy from the sun then traps it. Plants extract CO₂ from the air and store it in their bodies. So as the prehistoric jungle bogs grew deeper and deeper on their way to becoming coal, more and more CO₂ was pulled from the atmosphere, allowing it to cool to the more moderate temperatures of recent history. But records show that with the onset of the Industrial Revolution and its ushering in the burning of fossil carbon to run vehicles and factories, world-wide atmospheric levels of carbon dioxide began to rise. It's risen a staggering 9% just since 1958! The 1970's and 80's have seen a rapid increase in the burning of fossil carbon fuels AND in deforestation...trees are an important part of the earth's thermostat in that they not only extract carbon dioxide from the air and lock it up in their wood, but forested areas cool the earth beneath them by evaporation of water and by reflecting heat back into space. Sadly, much deforestation results from slash-and-burn farming, in which forests are cut down and BURNED, thus

oxidizing the carbon in their wood on a huge scale. These deforested areas then experience population booms of two life forms...termites feeding on the millions of stumps, and huge herds of cattle that are raised as a cash crop on the newly-created grazing land. Darlin's, both of those creatures release prodigious amounts of methane, that's right, fart gas, as a result of the digestion of the cellulose they eat. So? It's now known that methane GREATLY magnifies the Greenhouse Effect produced by CO₂, and the rapid rise in the number of termites, cattle, and landfills (they release methane as their buried garbage decays) has resulted in rapidly rising atmospheric methane levels around the world. Because of all these factors combined, the 1980's are now the hottest years on record, with no end in sight. Sea levels ARE rising. The Poles and many mountain glaciers ARE shrinking. Deserts are increasing in size, and droughts are increasingly common. So what do we do?

Switch from fossil carbon to HYDROGEN, which is extracted from water and, when burned, becomes water again...literally a fuel that recreates itself. Cars and factories run fine on it with minor modifications. Talk about hydrogen. Write your utility company and representatives about it. Boycott imported tropical origin wood and beef. Plant three trees. Garden organically to foster methane-absorbing bacteria. Burn less wood. Fart less. Write Exxon and ask they sell you hydrogen instead of gasoline. HYDROGEN honey, HYDROGEN!

XOXOXO Margaret Head

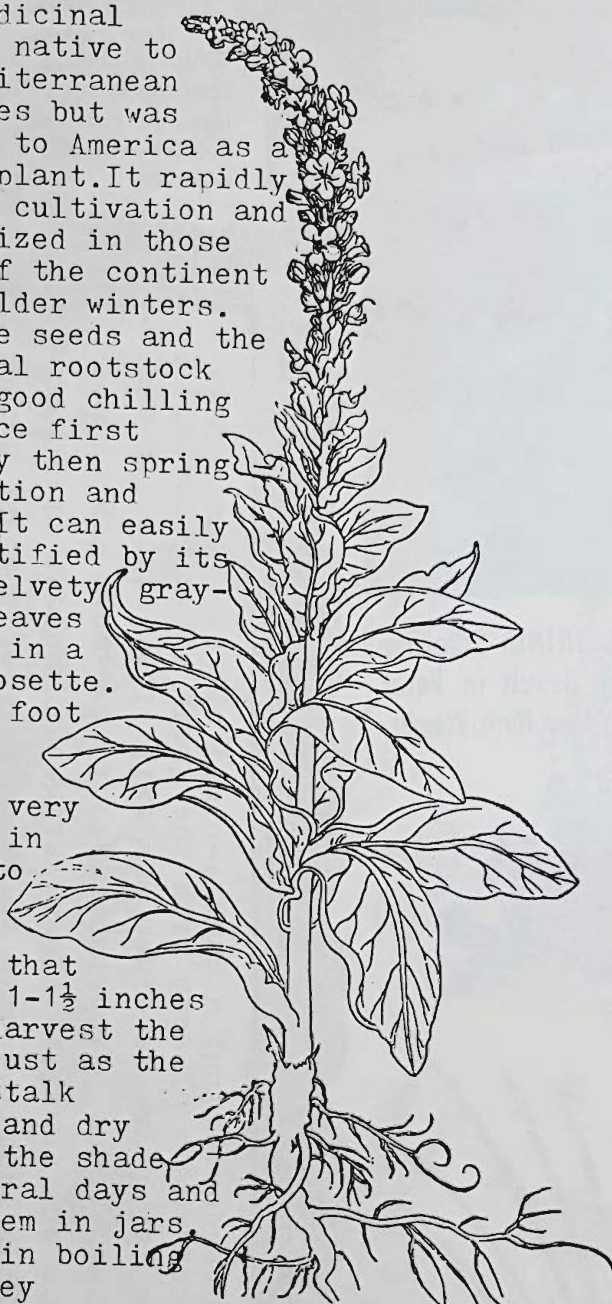


Scrophulariaceae]

MULLEIN

[Corollifloral

This medicinal herb is native to the Mediterranean countries but was brought to America as a valued plant. It rapidly escaped cultivation and naturalized in those parts of the continent with colder winters. Both the seeds and the perennial rootstock need a good chilling to induce first dormancy then spring germination and growth. It can easily be identified by its large velvety gray-green leaves growing in a basal rosette. The 5-6 foot flower stalk emerges very rapidly in summer to display yellow flowers that measure 1-1½ inches across. Harvest the leaves just as the flower stalk emerges and dry them in the shade for several days and store them in jars. Steeped in boiling water they yield a tea that is not only delicious but soothing to all mucous membranes. The leaves are also smoked to ease lung ailments. Members of the snapdragon family, some verbascums are grown as ornamentals.



732.—GREAT MULLEIN. HIG TAPER.
 VERBASCUM THAPSUS. F. 846.
 Yellow. Height 6 ft. Flowers 1½ in.

To order some very interesting native American food crop seeds, send \$1 and a catalog request to: Talavaya Center, Rt. 2, Box 36 A, Espanola NM 87532

The universe is change; our life is what our thoughts make it. Marcus Aurelius Antoninus AD 150

Even a thought, even a possibility, can shatter us and transform us. Neitzche 1844-1900



BUT WAIT... YOU ARE NOT QUITE FINISHED YET





3834. A dibber. One of the most useful implements to aid in the transplanting of small plants. The plant is dropped into a hole made by the dibber; this hole is closed by inserting the dibber at the side and moving it against the plant.



Children should not be forced to conform to so-called masculine or feminine patterns. Household duties, for example, should be shared equally.

All is flux...nothing stays still. Heraclitus c. 500 B.C.

SURGEON GENERAL'S WARNING: Smoking By Pregnant Women May Result in Fetal Injury, Premature Birth, And Low Birth Weight.

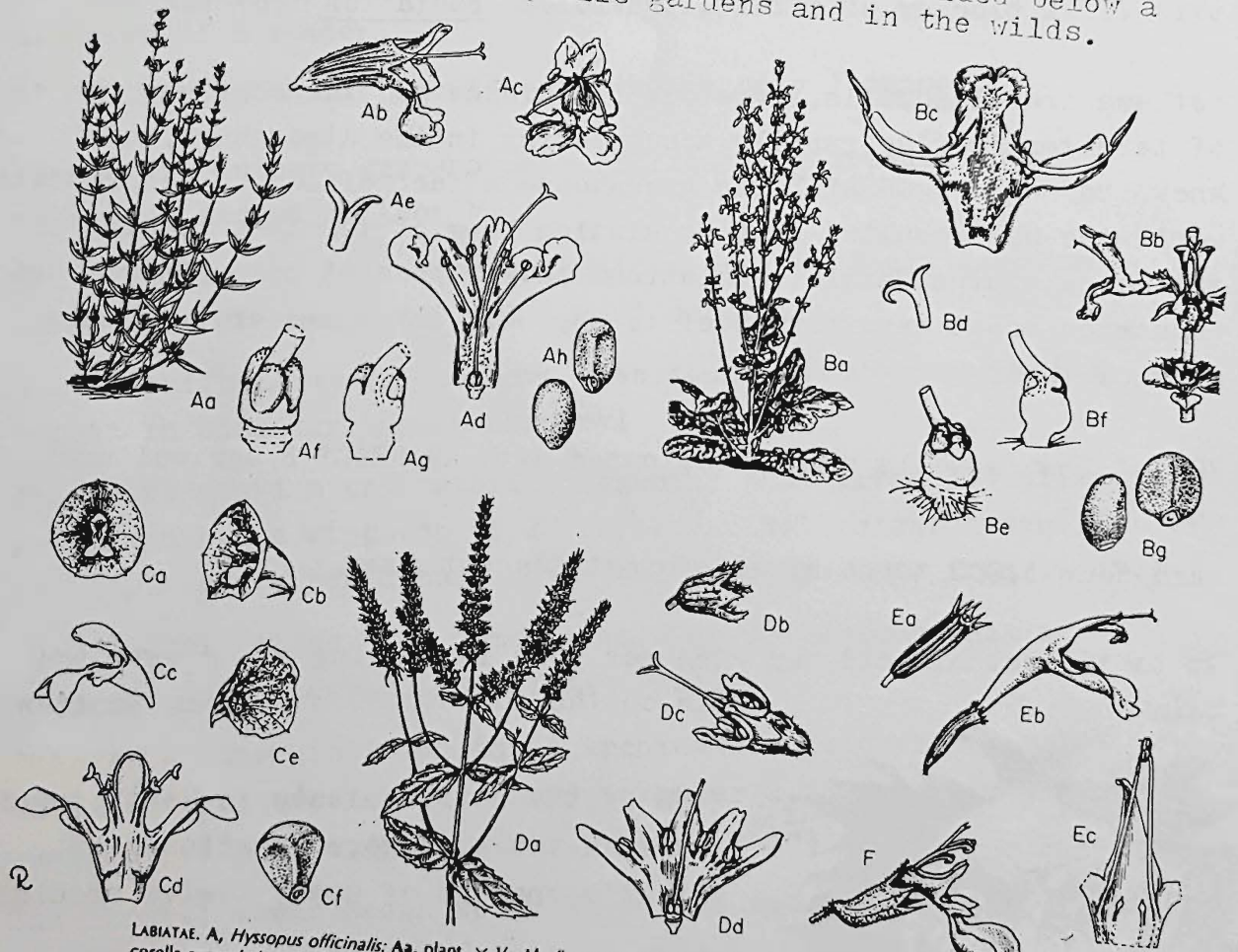


VALLOTA PURPUREA.

To make a drip irrigation device for seedlings, newly-planted shrubs and trees, or large potted plants while you're on vacation, just cut a 2 inch hole in the top of an empty 2½ gallon plastic drinking water jug, the rectangular type with a little spigot at the bottom. Refill it through the hole, barely pull out the spigot and ZOWEE!, you've got slow drip irrigation! And to boost seedlings, just add a tad of manure tea!. Like wow, man, phukinay, like, far out, I can dig it! tad of manure tea!. Like wow, man, phukinay, like, far out, I can dig it! tad of manure tea!. Like wow, man, phukinay, like, far out, I can dig it!



Mint family members, both cultivated and wild, are very useful to humans, not only as culinary and medicinal herbs, but as sources of nectar for honey and color for our gardens. All members of the Labiatae (mint) Family share the common characteristics of square stems and opposing leaves. Most are perennials that not only live year after year but spread vigorously by runners above and below ground. The salvias of the flower garden are in this huge family, as are many culinary herbs like basil, thyme, sage, the mints, hyssop, lemon balm, and marjoram. Lamb's ear, *Stachys byzantina*, and rattlesnake root, *Stachys betony*, are members, too. *Betony* is native to Florida and produces delicious, crunchy white tubers. Since many people are becoming interested in plant morphology and identification, I've provided below a guide to use in public gardens and in the wilds.



LABIATAE. A, *Hyssopus officinalis*: Aa, plant, $\times \frac{1}{2}$; Ab, flower, side view, $\times 3$; Ac, flower, face view, $\times 3$; Ad, flower, corolla expanded, $\times 3$; Ae, stigma, $\times 10$; Af, base of pistil, $\times 10$; Ag, base of pistil, vertical section, $\times 10$; Ah, nutlets, two views, $\times 5$. B, *Salvia forskahlei*: Ba, plant, $\times \frac{1}{4}$; Bb, two verticillasters, $\times \frac{1}{2}$; Bc, corolla, expanded, $\times 1$; Bd, stigma, $\times 6$; Be, base of pistil, $\times 5$; Bf, base of pistil, vertical section, $\times 5$; Bg, nutlets, two views, $\times 5$. C, *Molucella laevis*: Ca, flower, face view, $\times \frac{1}{2}$; Cb, flower, three-quarter side view, $\times \frac{1}{2}$; Cc, corolla, $\times 1$; Cd, corolla, expanded, $\times 1$; Ce, fruit within calyx, $\times \frac{1}{2}$; Cf, nutlet, $\times 3$. D, *Mentha spicata*: Da, inflorescence, $\times \frac{1}{2}$; Db, calyx, $\times 8$; Dc, flower, expanded to show stamens and staminodes, $\times 1$. E, *Monarda didyma*: Ea, calyx, $\times 1\frac{1}{2}$; Eb, flower, $\times 1$; Ec, segment of corolla, expanded to show stamens and staminodes, $\times 1$. F, *Teucrium chamaedrys*: flower, $\times 2$. (B, species representative of *Salvia*, but not in general cultivation; Eb, F from Bailey, *Manual of Cultivated Plants*, ed. 2.)

The volatile oils of certain species are of economic importance: distilled oils and perfumes for industry are obtained from *Lavandula*, *Mentha*, *Pogostemon* Desf., *Rosmarinus*, etc.; and *Perilla*, *Ocimum*, *Origanum*, *Salvia*, *Thymus*, and others are used as sweet herbs. Tubers of *Stachys* are edible.

Bad News

Andy Booth of Greenpeace International reports that commercial incinerator ships burn much of Europe's garbage in the middle of the North Sea, then dump the toxic ash there, too.

A second hole in the ozone layer has developed, this one over the North Pole...a third appears to be nibbling away at a tropical portion of this VITAL blocker of fatal ultraviolet radiation from the sun.

Methane from landfills, livestock flatulence and the fart gas (no kidding) of termites is also rapidly accumulating in the atmosphere, and is known to magnify GREATLY the greenhouse effect of CO₂ ...deforestation worldwide has resulted in a population boom of termites feeding on all those stumps. Cattle populations have also shot up as Third World countries boost exporting beef to the West as a cash crop to help service their huge debts.

70% of Iowa's wells are contaminated with AT LEAST 6 agricultural chemicals.

Each hour 3,000 acres of rainforest are cut down.

Up to 15 lbs. of acid per acre per year is falling along with the rain on the forests of the North Eastern U.S.



8% of the native plants in North America are on the endangered species list... that's one out of every twelve species!

The intakes of power plants on the Great Lakes annually use 25 billion gallons of water for cooling and kill the eggs of an estimated 600 million smelt, 15 BILLION alewives and 1½ million yellow perch EVERY DAY!!

As a well-spent day brings happy sleep, so life well-used brings happy death. Leonardo Da Vinci

1452-1519



Phukinay!



A chicken named "Weirdo" was confirmed in January 1973 to weigh 22 lbs....it killed two cats, its 18 lb. male offspring, crippled a dog and gave its owner 8 stitches.

Pacific giant kelp can grow over 17 inches each day.

The smallest known star is a white dwarf labelled LP-327-186. It is 100 light-years away and is approximately only 1/2 the diameter of our moon!

35 million epiphytic orchid seeds weigh only 1 ounce.

Female New Guinean grasshoppers (*Silicoferg grandis*) can exceed 10 inches in length.

The electric eel (*Electrophorus electricus*) of South American rivers can discharge 400 volts at 1 ampere.

Edible puffball mushrooms have been found that were actually 5 feet in diameter. Ummm, mushroomy!

Meganeura monyi, a prehistoric dragonfly that lived 300 million years ago had a wingspan of 27 inches!...talk about a beneficial insect, this one could sure keep your cherries safe from birds.

10,000 cubic miles of a comet's tail is so tenuous that it contains only 1 cubic INCH of material.

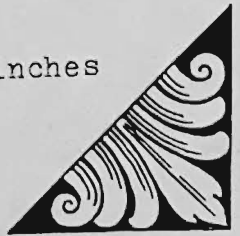
The eye of the giant sea squid *Archteuthis* is over 15 inches in diameter. A specimen captured November 2, 1878 was 55 feet long and weighed 4,450 pounds...that's a lotta sushi!

The largest seeds known weigh 40 pounds and form on *Lodoicea seychellarum*, a species of coconut palm.

The sun consumes 4,500,000 tons of hydrogen EACH SECOND, converting it into helium and energy.

Asian mouse deer ADULTS weigh 6-7 pounds and stand 8-10 inches at the shoulder!

A gain it is to find a beautiful human soul. Johann Gottfried Herder 1744-1803



We are constantly invited to be what we are.
Thoreau



REAL MEN DON'T USE

Diazinon

**I Found
Peace of Mind
In the Most
Unexpected
Place!.....**



... "The Garden Doctor"! It's informative,
irreverent, it's political, it's only \$24
per year for four hand-colored issues
PLUS 12 neat sample packets of seeds,
herbs, organic fertilizers and pesticides.
ZOWEE! It changed my life! Order it NOW!
The Garden Doctor 1684 Willow, Denver, CO
80220