

Frost Doesn't Color Leaves in Fall Time, Says Peck

CHEMISTRY OF CHANGE NOTED

Green Pigment Goes Quickly When Life Dies but Yellow Stays on

By M. E. PECK
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The coloring of autumn foliage is a perfectly normal and regular recurrent phenomenon in the life cycle of plants, influenced to some extent by external conditions but not primarily dependent upon them.

Thus the quite prevalent idea that frost causes the change from green to red and gold has no foundation in fact. It can do no more than hasten the process. The event that would sooner or later occur under any conditions. Light is a more important factor. Most of us have noticed that in the Willamette valley when rains and cloudy weather prevail during October, the autumnal coloring of foliage is dull and transitory, but that in seasons of sunshine like that of the present year, the display is brilliant and lasting.

The development of the coloring is due to chemical changes that take place in the leaves as their tissues die. The yellow color is really in the leaf during its whole life period, but is veiled by the green. The minute green bodies called chloroplasts in the cells of leaves contain two pigments, one green and the other yellow. With the coming of autumn there develops a layer of cork-like tissue between the base of the leaf stem and the twig to which it is attached. This effectively cuts off all communication between the leaf and the parent plant, and stops its water supply and causes its slow death soon followed by its fall.

With the cessation of life the green, and unstable pigment quickly fades out, but the more persistent yellow remains for some time and becomes visible, and hence the "change of color."

The red color is of quite a different nature, having nothing to do with the chloroplasts. It is due to a pigment called anthocyanin that is dissolved in the cell sap. It is usually associated with an abundance of tannin or of sugar or both, but just why this is the case we do not know.

The chemical changes that occur in the leaf with the cessation of life lead to its development. It is noticeable that many leaves, such as those of the dogwood have a little blue color mingled with the red, giving them a purplish tinge. This blue pigment is also anthocyanin. When it develops in a cell with an acid cell sap the color is red, but when the cell sap is alkaline, it is blue.

It is an interesting fact that the same pigments that paint the autumn leaves also give color to the flowers. The anthocyanin of the maple leaf in October does not differ from that of the hattercup in March, or the anthocyanin of the dying dogwood leaf from that of the unfolding petals of a rose. Profuse as Nature is in her coloring, the pigments she employs are few; yet what infinite skill in the blending.

MISS BALDERFEE NOT GIVEN AWARD

That efforts on the part of the Salem chamber of commerce to secure a Carnegie hero award for Miss Echo Balderfee were unavailing is revealed by the announcement of the awards which has just been made.

According to C. E. Wilson, secretary of the chamber of commerce there has never been a report from the award committee in regard to the request for recognition of Miss Balderfee who rescued a child from drowning.

Bronze medals were awarded by the Carnegie hero fund commission Friday to 46 persons who performed acts of heroism in saving or attempting to save the lives of others.

Nine of the heroes lost their lives. To the dependents of one of these, Jay Booth Meredith of Merced Falls, Cal., death benefits of \$80 a month were granted and a sum of \$1,500 was granted to the dependents of three others to be applied as the commission may see fit. One hero suffered injuries, and disability benefits of \$1,000 were granted him.

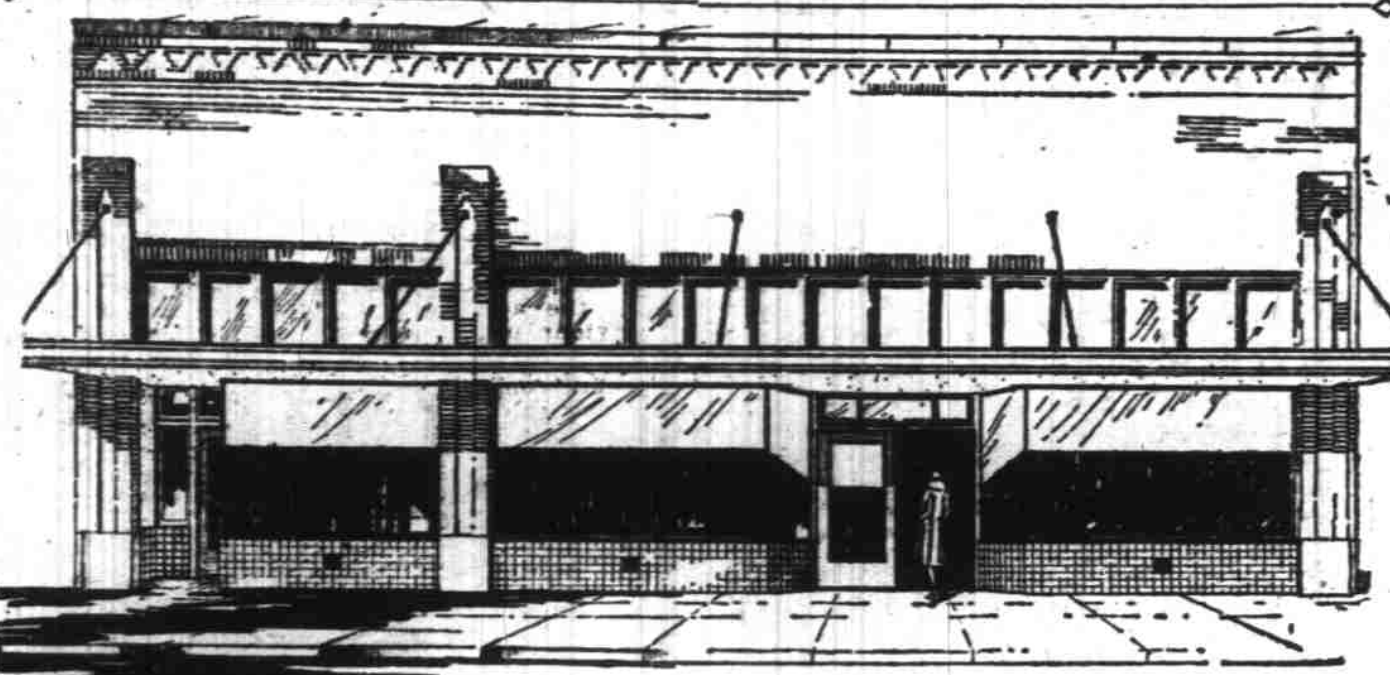
Removal of Conifers is Best in Spring; Tips are Given on Proper Means

Are you planning on "installing" a few conifers this fall? Well, here is a wee tip that may be of value to you and keep disappointment from your door. Spring is the time best suited for successful transplanting of conifers. They can be moved with little setback up to the time when new shoots are starting, and even later by experienced planters, though it is sometimes necessary to pinch off part of the new shoots which otherwise might wilt.

Now instead of getting them ready for planting this fall wait a bit and then when ready in the spring dig a hole a foot larger and deeper than the ball of earth which contains the roots.

Cover Roots With Burlap
If you do your own transplanting loosen all the way around the tree roots and lift out into a bucket which will neatly cover the roots and fasten about the trunk.

NEW BUSINESS HOME UNDER CONSTRUCTION



THIS architect's drawing shows the front of the new Edward Schunke building being erected on North High street as the home of the Roth Grocery company. Frank R. Struble, architect, says the new building will be finished by December 15. F. L. Odum has the contract for its erection. The building, a one-story structure, will be 56 feet in width by 125 feet in depth. The main store room will be 38 by 70 feet in size. A meat room, kitchen room, vegetable cooling room, warehouse and order filling room will take up the space in the rear of the main store room.

A basement, the full width of the building and extending back for 85 feet from the front is being constructed.

HIGHER TARIFF ON LUMBER ADVOCATED

PORTLAND, Oct. 31.—(AP)—Retrival of the lumber industry of Oregon and Washington by means of a "protective tariff" to cover the difference in production costs existing between American labor and foreign labor, is predicted by Senator Charles L. McNary. Speaking on the lumber industry here Col. Alfred E. Clark declared McNary had pledged himself to work for higher lumber tariff.

McNary was quoted as believing the present duty of \$1 a thousand, to be increased to \$1.50 as a result of a study of production costs being made by the tariff commission, is only the first step toward achievement of a lumber schedule that will impose a tariff of \$3.00 on Canadian soft-wood lumber and a still higher duty on admissible Russian lumber, as distinguished from Russian lumber produced by either convict or forced labor, or lumber exported for the purpose of dumping it on the American market, all of which is now excluded by law.

"One of the greatest values in connection with the duty, even though it may be questioned that the protection is wholly inadequate," Col. Clark said, "is that congress has created a precedent by giving some protection, and congress in the future can increase that duty to a point where it will completely protect the lumber industry of Oregon and Washington."

Valsetz

VALSETZ, Nov. 1.—Chauncey Ferguson was ill with the flu on Wednesday and was unable to work.

Ruth Fushang, was unable to return to school Wednesday morning after hurting her left arm Tuesday. Dr. Cameron bandaged it and said that the bone was cracked.

The P. T. A. gave a Halloween dance Saturday.

Fruitland

FRUITLAND, Nov. 1.—Church services will be held at the Fruitland Evangelical church Sunday school at 10:00 a. m. and preaching at 11:00 a. m. Rev. Plowman will preach this Sunday. All are welcome.

Property of the Fruitland community was not molested to any great extent by the Halloween prank. The all seemed to spend a quiet evening.

Mr. and Mrs. Orsa Faxg and family attended the funeral of their cousin, Ivan Smith Saturday afternoon. He died at his home in Corvallis at 2 o'clock Thursday afternoon after a short illness caused by tuberculosis.

The hunting of game birds has drawn to a close of another successful season. Many hunters of this community have kept well supplied with china pheasants. One or two were fortunate enough to get a deer during season too.

Lloyd A. Lee has almost completed the construction work of

How Does Your Garden Grow?

By LILLIE L. MADSEN

Anyone who has followed the Primrose Path will admit that it has its pitfalls and disappointments, but he will also admit, I am sure, that it is a gay and charming path to follow—provided one chooses the right location for the path and the right companions for that location. One might get discouraged and not find the path so charming should one try to force a P. P. glaucosens, a lime-lover, to follow the path of P. glutinosa, which detests lime.

Primroses also land themselves admirably to collecting and who at some time or other, can resist the urge to "collect." And no garden is too small to harbor at least a tiny bit of the Primrose Path.

Very rarely all Primroses like deep, rich, well-drained soil with plenty of moisture in the dry season. Most of them also prefer at least partial shade and there are many varieties of Primroses which do well in dense shade where scarcely any other hardy plant will thrive. However, there are some of the European alpine primulas which do best in sun.

If you have a permanent planting of Primroses it is well to give them an occasional top dressing of well-decayed cow manure or rich leaf mold. If you plan on making a Primrose planting and your soil is heavy clay that becomes soggy in the winter you should dig a depth of two feet and put down a six inch layer of fine gravel or broken brick and fill in with loam, leaf-mould and a little sand.

Most Primrose experts advise dividing the clumps of the spring blooming varieties as soon as they put down a new layer of May, June, or early July. And far be it from me to dispute the soundness of this advice—provided you have plenty of water. But if you live in the country and have time and water for gardens are scarce and you still want Primroses—

his new 20x50 foot brooder house. He is planning a bigger and better season to follow. Mr. and Mrs. Claude Armstrong were called to Forest Grove Friday night to see their new nephew who is very seriously ill and not expected to live.

Mrs. Stabenow's daughter from Corvallis is visiting her over the week end.

COOKING SCHOOL POPULAR

HUBBARD, Nov. 1.—Keen interest was shown in the cooking demonstrations and also in the helpful hints on preparing various dishes by Miss Rita Conner, home service expert, Thursday afternoon at the second of the series of two free cooking matinees held at the Pythian hall. Door prizes—dishes prepared by Miss Conner at the afternoon meeting, went to Mrs. Neva McKenzie, winner of the green cracker cake, Miss Rose Jordan, named for the oven dinner, Miss Lenora Scholl, a pie, and Mrs. Laura Jackson, Mrs. Florence Barclay, Mrs. Sadie Scholl and Miss Ruby Crittenden, pastry flour.

ATTEND CHURCH RALLY

MONTOR, Nov. 1.—Mr. and Mrs. W. G. Wolfe and Mrs. Dorothy Gillanders accompanied by Lester Wolfe, of the Open Air sanitarium, Salem, were dinner guests Sunday of Miss Loreta Wolfe at her apartment in Salem. In the afternoon they attended the Young People's Rally at the Congregational church, Salem. Others attending the rally from here were Rev. D. J. Gillanders and son Kenneth.

CLUB WILL MEET

AURORA, Nov. 1.—The Community club will meet Tuesday evening, November 4, at 8 o'clock in the Molalla Electric company office. This will be the first meeting since the summer vacation of this club. George Elison, president, urges all members to be present when outlines for the coming year will be presented, committee appointed, and the activities of the organization will get under way.

HIKING GROUP IS 'BOHEMIAN'

Miss Burkholder Writes of Organization at Cottage; Chemeketas, Model

By BELLE BURKHOLDER
"Trail 'em to Salem, the best city on the map," was the slogan Stanley Vail gave to the Chemeketas, and the writer heartily agrees with the sentiment, but has followed a trail that leads far to the south of the capital city. Through association with the Chemeketas of Salem the idea was conceived of organizing a similar outdoor club in Cottage Grove. This organization was perfected on a hike which was taken recently to the Bat Caves about three miles south of that city.

By dint of much newspaper publicity and correspondence a number of kindred spirits who are interested in the outdoors and hiking were gathered together for the first hike of the club. A recent trip with the Eugene Obidians fired the zeal of the writer for the project. An intense love of outdoors, however, must be born within a person, for while it can be cultivated the inclination must be in herent. So it is with the newly organized Bohemians.

The club name is derived from the gold, silver and lead mining district, lying about 35 miles southeast of Cottage Grove in the Calapooia range. At times this district has undergone extensive development but at present is dormant. Most of the ore lying close to the surface has been mined and it will now require more capital to delve deeper into the veins beneath the top.

Country Wild Rugged
It is a wild and rugged district and until this summer almost impassable for the modern car, but now with the extensive road work being completed it is expected that it will be much more accessible for travelers next summer. The Bohemians are planning on making this region their playground as Mt. Jefferson is for the Chemeketas.

Then there is a romantic sound to the name Bohemia that has been passed on to the Bohemians. Gypsies came from Bohemia and modern Oregonians with their love of outdoor trails, seem to have a tinge of Gypsy blood in their veins. It is well to give vent to the lure of the outdoors and organize clubs to preserve the natural woodland trails in all their beauty.

The Bohemians on their first trip made their camp under huge overhanging rock and while the coffee simmered over the bonfire, a business meeting was held and the necessary officers were elected. The writer was elected president, and Mrs. Mabel Dixon, chairman of the local walks committee.

The organization is patterned after the Chemeketas as nearly as local conditions will allow. The club has already been invited to hike with the Eugene Obidians. Should the Chemeketas ever come this far south, let me say here, it would be well worth their while. There is much natural beauty at the head of the valley, which is a steep incline up 24 miles from Salem, with an elevation of 695 feet and surrounded on all sides by hills and mountains. Bohemia mountain and Fairview tower rise to at least 4000 feet above sea level and are snow covered much of the year. We invite you to visit us, and join us in our hikes.

North Howell

NORTH HOWELL, Nov. 1.—George and Sam Schirman have just finished building a new silo for Earl Harmon. This is the second large silo on the Harmon dairy farm. The Schirman's recently bought the E. C. Wiesner farm joining the Harmon place. Mr. and Mrs. C. E. McIlwain, J. E. Waltman, Lester Waltman and Arthur Vinton, have been spending the past week at Silts fishing. Walter Vinton, who has

PLACES TO VIEW TOLD

Fall Makes New Displays in City of Salem HOME SITES LOVELY

There are some places to view in Salem today which will be worth the time of anyone interested in the beauty of color and growing things. The flowers may not be so beautiful as during the summer but there is color in leaves on trees and vines which vies with any beauty of the summer or spring.

There are still a few beautiful flowers and yards even with all the frosts and rain. You will find one of these at 1040 and 1045 South Liberty street; and again there is a lovely display of cosmos between 991 and 995 South Liberty street. You will also find some hollyhocks at the north end of the bridge on Summer street; and again there is a pretty display of fall asters, tiny little things and pom pom dahlias at and just east of 765 Hood street.

Now for the leaves and color. Take a long look down the vista of Summer street from the front of 775 Summer; the Boston ivy at 980 Summer, and again at 775 Summer. You will find much more as you drive. Then for some other places just here and there:

Catalpa Trees Seen
Look especially as you drive down Summer street at the fir thorn to be found all along the street; at the catalpa trees in front of 775 Summer; the Boston ivy at 980 Summer, and again at 775 Summer. You will find much more as you drive. Then for some other places just here and there:

1520 North 5th street.
Strawberry tree, perhaps the only one in town, in corner of yard at 1178 Chemeketa—seed pod worth investigating.

Sumack trees and snowballs, 1177 Center street.
Walnut trees and snowball bushes, 903 Center street.

Oak trees in parking of 385 North Summer street.

Boston ivy on fireplace of 426 North Winter.

Willamette university campus

a farm at Silts entertained his relatives at his home there.

Mr. and Mrs. Carl Mikkelsen have rented a farm near Silverton and expect to live there during the winter. They have rented the Webb farm, perhaps better known as the Ben McGinnis place.

Zena

ZENA, Nov. 1.—Mrs. Florence Walling Toner returned to her home at Toledo Saturday after visiting for several weeks in Zena and Salem. Jesse Walling of Zena, a nephew of Mrs. Toner and her brother, Grand Walling of Wheatland accompanied her home. Grant Walling to remain indefinitely and help her with farming operations as Mr. Toner died a short time ago. Jesse Walling returned to Zena Saturday.

L. D. Waring, owner of a walnut orchard near Zena and manager of Vick Brothers' walnut orchard in the hills north of Zena was here Thursday. Mr. Waring requested that all pickers employed in the two orchards cease work until after the funeral of his father-in-law, Alva B. Barber who died in Salem, October 29.

BILLION FEET IS CUT IN MILLS' RUN

Lumber Producers Continue To Curb Output to Stop Overproduction

A total of 303 sawmills reporting to the West Coast Lumbermen's association for the week ending October 25 operated at 45.52 per cent of capacity, as compared to 47.53 per cent for the previous week and 65 per cent during the early part of 1930. In the 22-week period since the week ending May 24, the industry has operated on an average of 48 per cent of capacity, which has resulted in more than one billion feet being cut from production. This decrease represents more than seven weeks' production at the present rate of cutting, for the entire industry in the Douglas fir region of Oregon, Washington and British Columbia.

Production and orders both showed decreases during the week ending October 25 when compared to the previous week. Current new business reported by 228 identical mills was approximately four per cent under production and shipments were 11.42 per cent under. Orders received by these 228 mills during the 14-week period from July 21 to October 25 exceeded the lumber output by 4.19 per cent. During the past week orders in the rail trade decreased about 5,000,000 feet, domestic cargo orders dropped 9,000,000 feet, export gained about 3,500,000 feet, while local orders approximately the same. Unfilled orders increased 4,000,000 feet during the week.



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