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Preparing for Garden Tomato Diseases

Gardeners are busy planting and anticipating the delicious harvest...especially the first tomatoes. Everyone should realize there are several types of tomato diseases that you may encounter this season and this article will summarize the diseases and control options.

Fungal Leaf Spots: Both Early Blight and Septoria Leaf Spot diseases are widespread. The diseases have been favored by the rain and leaf wetness we have had so far this summer. Early blight is characterized by the brown, somewhat target-shaped leaf spots, often becoming a half-inch or more across. As the lesions come together, the leaves turn yellow, become blighted and may hang from the plant as curled, brown dead foliage. For Septoria Leaf Spot, the end result is the same, but the spots are tan, fairly circular, and usually remain under one fourth-inch in size. These two diseases can be prevented by application of fungicides containing chlorothalonil (Ortho Garden Disease Control, Daconil, Bonide Fungonil Multipurpose Fungicide) or fixed copper sprays (Bonide Liquid Copper, Ortho Elementals Garden Disease Control), all available at garden centers. However, little benefit is achieved if one waits until strong activity exists before start-

ing spray programs. A suggested tomato spray schedule would be copper + mancozeb sprayed weekly for the first eight weeks after transplanting then change to copper + chlorothalonil for the rest of the season. Thorough coverage of the foliage (top and bottom of leaves) is critical when spraying. These fungicide are protectants so timely sprays are important to success. Read and follow all label directions.

Fruit Rots: Blossom-end Rot is not can be avoided with adequate supply of soil moisture and adequate calcium levels (use of calcium chloride foliar sprays may assist as well). There is some Buckeye Rot which causes dark brown to black areas to develop on the fruit surface followed by decay. Unlike Blossom-end Rot, the blackened area is not sunken, and it may appear anywhere on the fruit, but usually on that part touching the soil or closest to the ground. Mulch can be used to reduce exposure of the fruits to the soilborne fungus and will also help reduce the occurrence of blossom-end rot. The Late Blight fungus can also cause blackened areas of the fruit, but may be rough and sunken at the margins compared to Buckeye Rot. Late Blight also attacks the foliage, blighting leaves, petioles and stems. Home garden fungicides containing chlorothalonil or fixed copper can be used to prevent fruit rots cause by these two fungi. See the suggested spray schedule in the previous paragraph.

Wilt Diseases: Walnut Wilt affects whole plants due to exposure to the toxin, juglone, produced usually by the roots of walnut trees growing near the garden. The toxin can even be produced

by roots decomposing in the garden soil after the trees have been cut down. A brown staining of the xylem tissues in the stem can be seen when cut open. A similar dark staining of the xylem may occur when Fusarium wilt, Verticillium wilt, and even with root-knot nematode. Use of the VFN tomato varieties will prevent the latter three diseases.

Bacterial Spots: Bacterial Spot and Bacterial Speck can occur in home gardens. In some cases, the microbe causing bacterial spot may have been splashed to tomatoes in the garden from infected pepper transplants bought at a garden store. Bacterial Spot appears as dark, somewhat angular moist-looking spots on leaves and fruits. Disease-control chemicals containing fixed copper may help suppress this disease, but copper-containing chemicals are only partly effective and can damage the plant. Follow label directions.

Stem Cankers: Bacterial Canker occurs in commercial tomatoes, but less commonly in home garden tomatoes. Look for brown lesions on petioles and stems and wilting and drying of foliage associated with the

cankers. The Early Blight fungus also causes brown lesions on leaf petioles and stems, and as is seen on the leaves, the typical concentric texture of the lesion should be visible.

Mosaic: Tomato Mosaic Virus (TMV) can cause mottling and mosaic symptoms and somewhat deformed growth of the leaves and uneven ripening and gray wall of the fruit. Where TMV occurs in the home garden, look at the practice of saving tomato seeds from tomatoes harvested one season and planted the next as a possible practice which perpetuates the disease.

A very good publication with great color photos of tomato, pepper, and potato pest problems is UK Extension publication ID-172, An IPM Guide for Common Pests of Solanaceous Crops in KY. Contact us for a free copy. For vegetable and other plant disease identification and control options, contact the Estill County Extension Office at 606-723-4557.

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Stickeler's Puzzle



Try your luck with the following group names for various things. For example, a group of islands is called a chain, a group of mountains is a range and a group of trees is an orchard, a forest or a thicket.

- 1) candidates
- 2) asteroids
- 3) bacteria
- 4) circuits
- 5) experts
- 6) trucks

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Stickeler's Answer on Page 11

Wishing Well®

5	6	4	2	4	6	4	5	4	6	4	7	2
M	F	C	G	H	O	A	O	R	C	M	Y	E
5	3	6	5	3	5	3	6	5	6	4	7	5
D	A	U	E	C	R	T	S	A	E	I	O	T
4	7	2	3	8	6	2	7	5	8	5	7	6
N	U	T	B	S	N	O	G	E	H	S	A	E
5	7	5	4	7	4	2	5	2	3	4	5	4
P	I	E	G	N	N	R	N	G	O	E	D	W
7	5	3	7	2	4	5	8	6	5	4	2	8
R	I	L	E	A	F	N	A	R	G	R	N	R
4	3	8	2	3	2	6	4	8	6	7	3	4
I	D	E	I	L	Z	G	E	I	I	S	Y	N
7	4	7	8	6	7	2	7	8	2	6	8	8
P	D	E	D	E	C	E	T	E	D	S	A	S

HERE IS A PLEASANT LITTLE GAME that will give you a message every day. It's a numerical puzzle designed to spell out your fortune. Count the letters in your first name. If the number of letters is 6 or more, subtract 4. If the number is less than 6, add 3. The result is your key number. Start at the upper left-hand corner and check one of your key numbers, left to right. Then read the message the letters under the checked figures give you.

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CryptoQuip

This is a simple substitution cipher in which each letter used stands for another. If you think that X equals O, it will equal O throughout the puzzle. Solution is accomplished by trial and error.

Clue: I equals O

VGDP K PYZCKPTD BQZDC QDKAAM

GKQX BI KTTIRJAZCG CIRDBGZPU,

Z'X CKM GD'C JYBBZPU GZC JDCB

EIIB EIQVKQX.

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CryptoQuote

AXYDLBAAXR
is
LONGFELLOW

One letter stands for another. In this sample, A is used for the three L's, X for the two O's, etc. Single letters, apostrophes, the length and formation of the words are all hints. Each week the code letters are different.

SE NKK JIA GNDR SL JIA

C.R. TADA WKNCAF ALF JX

ALF SJ TXCKF WDXONOKZ

OA KNOXD FNZ TAAUALF.

— FXCB KNDRXL

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Puzzle Answers

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Puzzles4Kids

Answer

ANGELS G
TISSUE E
BETTER T
METALS T
GAINER I
CINDER N
ANGERS G

LEANS SUITS
BERET
MALES
RANGE
CRIED
NEARS

VETOES O
GOBLIN L
BARKED D
DENISE E
STRIDE R

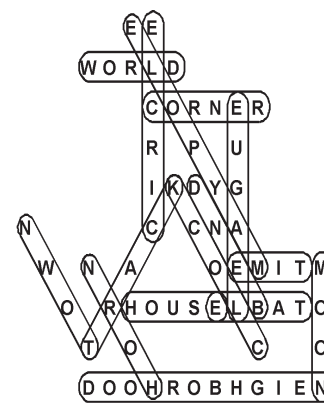
STEVE BINGO
BRAKE
DINES
TIDES

Letter Box

Solution

F	R	O	A	E	D	H	W	I
D	W	I	H	R	F	A	O	E
A	E	H	W	I	O	D	R	F
R	A	F	D	O	E	I	H	W
E	I	D	R	H	W	F	A	O
H	O	W	I	F	A	R	E	D
O	D	E	F	A	R	W	I	H
I	F	R	O	W	H	E	D	A
W	H	A	E	D	I	O	F	R

AROUND THE —



CryptoQuip

answer

When a nuisance tries really hard to accomplish something, I'd say he's putting his pest foot forward.

CryptoQuote

answer

Show me a sane man and I will cure him for you.
— Carl Jung

FEAR & KNIT

answer



Even Exchange

answers

1. Lodger, Ledger
2. Pulse, Purse
3. Incite, Invite
4. Howard, Coward
5. Paler, Paper
6. Gross, Grass
7. Barry, Berry
8. Finale, Finals
9. Crown, Crows
10. Daisy, Daily

Weekly SUDOKU

Answer

4	8	2	9	1	7	6	5	3
6	1	9	5	8	3	7	2	4
3	5	7	4	6	2	1	9	8
8	3	6	1	9	4	2	7	5
1	7	4	2	5	8	3	6	9
2	9	5	7	3	6	4	8	1
9	6	3	8	7	1	5	4	2
5	4	1	6	2	9	8	3	7
7	2	8	3	4	5	9	1	6

King Crossword

Answers

Solution time: 21 mins.

A	P	E	F	O	A	M	S	F	B	I
L	A	M	U	P	B	O	W	L	A	D
F	L	U	C	T	U	A	T	E	U	S
A	I	L	O	D	E	S	S	A		
M	U	F	F	L	E	R	E	N	T	
U	R	L	E	N	D	N	I	E	C	E
S	A	U	L	T	I	C	D	R	U	G
E	L	F	I	N	A	R	F	E	R	A
F	O	O	T	E	L	U	D	E	D	
D	J	I	N	N	I	W	A	S		
R	U	E	F	L	U	M	M	O	X	E
I	T	S	A	T	R	E	E	Y	M	A
P	E	T	T	H	I	N	S	Z	O	

Dr. Edwin Lewis Stephens, president of Southwestern Louisiana Institute, founded the Live Oak Society in 1934. According to Society bylaws, the only human member permitted in the Society is the honorary Chairman, who is responsible for registering and recording live oak members. The only requirement for becoming a member is that the live oak must have a girth (trunk circumference) of 8 feet or greater. Source: wikipedia.org

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Bible Trivia Answers
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ANSWERS 1 Neither; 2) Ab-salom; 3) Elisha; 4) Nicodemus; 5) Jacob; 6) Michael