

PECAN FERTILIZER AND SPRAY SCHEDULE FOR WALLER COUNTY By: David E. McGregor, Sr.

The fertilizer and spraying program for pecans in Waller County should begin in November and end in August of the next year.

In November, begin with the 97% Dormant Oil Spray. This spraying will control the phylloxera insect and scale insects. The phylloxera attacks the current year's growth and produces galls on the leaves. Severe infestation results in heavy defoliation of the trees. This small insect appears in early spring and begins to feed on the unfolding buds. The effects of the feeding cause the growth of the gall which soon encloses the insect. Within this gall a large number of young are produced. Later, the gal splits and releases the insects. The 97% Dormant Oil spray also controls obscure scale insects that over-winter in the bark of the tree. These insects, which are dark gray, closely resemble the bark of its host plant. This insect winters in the nymph stage and eggs are produced in the spring. Both obscure scale and the phylloxera insects are well controlled by the 97% Dormant Oil. Depending on weather conditions, spray the Dormant Oil in November, December of the current year, and/or by January 5th of the next year.

Fertilizing should begin in February. Young vigorous trees will need more fertilizer than older, mature trees. Research has shown that pecan trees need only two basic nutrients, nitrogen and zinc. Nitrogen should be applied in the soil and zinc on the leaves. Nitrogen is necessary for rapid tree growth. However, heavy nitrogen applications may burn roots and damage the trees. Therefore, it is imperative to apply small amounts of nitrogen early in the tree's life.

To provide adequate nitrogen for one year old trees, apply one pound of ammonium sulfate (21-0-0) in June. During the second year, apply one pound of ammonium sulfate during February, April and June, if they are growing fast. For three year old trees, apply two pounds of ammonium sulfate in February, April and June. Apply six pounds per tree beginning the fourth year, until the tree begins to bear. If the trees are not growing, fertilize only in February. A good rule of thumb is, if a pecan tree makes more than 12-inches per year, they you are applying too much nitrogen. If you have less than 6-inches per year of growth, then the trees are not growing enough. However, if you receive 6"-12" of growth per year, the trees are growing right. Be sure fertilizer is watered in well.

Zinc Sulfate can be applied along with both fungicide and insecticide spray, which should be applied any time spraying is warranted. Zinc Sulfate will prevent rosetting in pecans along with keeping the leaves pretty and green. If they are not pretty and green, chances are the tree is lacking Zinc.

For diseases on pecan trees, begin spraying Benlate for control of scab. Scab is a fungus which invades the young rapidly growing shoots and leaves and later the developing nuts. Severely infested nuts on highly scab-susceptible varieties fall or fail to develop, resulting in some crop failure and, in some cases, total failure. Pecans infested with scab will also result in faulty and light nuts.

The Pecan Nut Casebearer is an insect that will severely cripple the pecan industry. This is the most important insect pest of pecans, and attacks only pecans. Damage is caused by the larva which bores into and destroys the nuts. Larvae of the first generation are the most destructive. They are active in May and early June. The larva may destroy several nuts in a cluster. The second generation, which occurs about 42 days later, will tunnel into the nuts but the nuts are harder and fewer nuts are destroyed.

The insects, diseases, etc., that are listed above are by no means the only ones that affect the pecan producer; however, they are the most important ones. Refer to the spraying schedule below.

<u>Stem End Blight</u> - This disease causes green pecans to be left on the tree. This disease is caused by a fungus that infects the pecan just as it enters the water stage and prevents normal development. These trees will require a second shaking approximately 30 days later.

November, December - 97% January or February	Dormant Oil for the control of phylloxera and obscure scale insects.
February	- Apply 1/2 pound of Ammonium Sulfate (21-0-0) per diameter inch of tree trunk as measured 4 1/2 feet up.
March	- Observation.
April	- Apply 1/2 pound of Ammonium Sulfate (21-0-0) per diameter inch of tree trunk as measured 4 1/2 feet up, if the tree has not reached 12-inches growth on current year wood.

Suggested Fungicides Treatments - Pecans Waller County

Time	Chemical	Rate/100 Gal.	Susceptible	Resistant	
April 1-7 Budbreak Scab Rosette Insects	Abound Zinc Sulfate	6.3 oz. 2 lbs.	+	-	
April 10-15 - Prepollination Scab Rosette Insects	Orbit or Enable Zinc Sulfate	6.3 oz. 8.0 oz. 2 lbs.	+	-	
May 1-15 - Casebearer Scab Rosette Insects	Super Tin Zinc Sulfate	7.5 oz. 2 lbs.	+	-	
June 1 Scab	Super Tin	7.5 oz.	+	+	
June 15 Scab	Stratego	10 oz.	+	-	
July 15 Stem End Blight	Super Tin	7.5 oz.	+	+	
August 1 Stem End Blight	Orbit or Enable	6.3 oz. 8 oz.	+	-	

SUSCEPTIBILITY TO SCAB

Highly Susceptible	Moderately Susceptible	Resistant
Western	Cheyenne	Desirable
Moore	Caddo	Pawnee
	Cape Fear	Kiowa

Choctaw