HOW TO GROW BERRIES

<u>Raspberries</u>: New plants regardless of color, should never be planted near old possibly diseased wild growing raspberries. This is especially true of old wild-growing red raspberries. Red raspberries can be infected with viruses and show no symptoms. Any old raspberries or brambles growing within 1,000 feet of the planting site should be destroyed even if they appear healthy.

First choose the varieties you are going to plant, this will determine the way they are planted. RED and YELLOW varieties are planted 3'-4' apart in rows 6-12' apart Where as your PURPLE and BLACK varieties can be planted 2 1/2'-3' apart in rows 6'-12'. You want to leave plenty of room between rows for proper sun exposure and corridors for picking.

Along with other berries, Gooseberries and Currants all do best if they get a little afternoon shade to ease sunburn. Plant them in a filtered afternoon sun location and keep roots cool with good layer of mulch. Raspberries are very shallow rooted and can be planted horizontally like tomatoes. Red raspberries are susceptible to root rot and must have good drainage and rich slightly acidic soil. *Use Gardener and Bloom Acid Planting Mix* to amend the soil and as mulch as well. A high number of chilling hours are also required, which doesn't seem to be a problem in this area. (Chill hours are total hours under 45 degrees during the winter season.) See your El Dorado Nursery Professional for more explanation.

Blackberries are more heat tolerant and more tolerant of poor soils. 1/3 soil amendment (G&B Soil Building Conditioner or Gardener and Bloom Planting Mix) would be great as well about ½ lb. EB Stone Bone Meal.

Blueberries: See BLUEBERRIES HANDOUT

<u>Strawberries</u> do best in full sun. Create "beds" using organic compost and/or G&B Soil Building Compost, some EB Stone Bonemeal, at time of planting as well.

<u>All other varieties</u> should be in as much sun as possible. Research specific varieties to determine the height and width of each variety. Compact bushes like currant, gooseberry and blueberries can be planted closely. Vine types may be grown against a wall, fence, or trained on wires strung between posts. Strawberries make an excellent ground cover.

PREPARING THE SOIL:

All berries need a rich fast drained soil. Mix 30 to 50% organic material (compost from the pile, G&B *Soil Building Conditioner* or *Gardener and Bloom Planting Mix*) with the existing soil in the planting area. Red raspberries do best in slightly acidic soil so use *Gardener and Bloom Acid Planting* Mix as an amendment.

FERTILIZING:

The best thing for your berries is a 2"-3" layer of organic compost or manure and mulch at flower set again in the fall, being careful not to pile any around the main canes. You can also feed at blossom set in spring with *Gardener and Bloom Citrus and Fruit Tree* Fertilizer. Repeat once after harvest. Water in well.

PRUNING:

RED and YELLOW RASPBERRY: Raspberries fruit on 2 year canes. In fall remove the 2nd year canes that fruited this year. (They should be brown.) Leave the young smooth light green canes as they will bear fruit the next year. Destroy clippings to reduce chances of spreading disease.

BLACKBERRIES AND BLACK RASPBERRIES: Prune upright varieties midseason to keep height down, promote side branching, and increase air circulation. Let laterals (primacanes) grow the first year. Never top a trailing variety (Marion, Ollalie, boysenberry).

BLUEBERRIES AND CURRANTS: Prune when dormant. Remove damaged, spindly, or diseased growth, at the base of the plant. Remove 1-2 of the oldest canes. Prune to keep the bush open for ventilation.

STRAWBERRIES: Remove runners for larger individual berries. Leave runners for greater number of medium sized berries. Replace plants every third year.

INSECT PROBLEMS:

SEE YOUR NURSERY PERSON FOR SPECIFIC CONTROLS.

RASPBERRY HORNTAIL: Tips of new growth wilt and die. Cut out infested cane below area of damage. **CANE BORER**: Tunnels running from cut ends of canes down into the crown area. After pruning, cover cut ends of canes with sealant.

MITES: Foliage shows pale speckles and silvery appearance.

APHIDS: Tiny green or black insects on the underside of leaves. Soot-like deposit on leaves. **SLUGS, SNAILS, EARWIGS, AND SOWBUGS:** Holes chewed in leaves.

DISEASE PROBLEMS:

Never combine lime/sulfur with oil as a dormant spray. The oil acts as a penetrant and will fry the leaves. **Never spray raspberry foliage with oil.**

LEAFSPOT: Small purple spots with pale centers found on leaves and stems. Spray with fungicide in September, March and April.

LEAF RUST: Orange powdery spots on undersides of leaves. Spray fungicide in September, March and April.

PLANTING GUIDE FOR SMALL FRUITS

TYPE OF BERRY	PLANT SPACING	ROW SPACING	MATURE HEIGHT
Strawberry	1-2'	4-5'	12"
Raspberry	2-4'	6-10'	6' Best trained
Blackberry	3-6'	8-10'	6-8'
Blueberry	5'	8-10'	6-8'
Currants	4-5'	8-10'	3-5'
Gooseberry	4-5'	8-10'	3-5'

QUANTITIES PRODUCED PER PLANT

TYPE OF BERRY	NUMBER OF PLANT	QUARTS PRODUCED
Strawberry	25	20-30
Raspberry	24	20-30
Blackberry	12	10-15
Blueberry	4	15-17
Currants	3	10-12
Gooseberry	3	10-12