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MUSKMELON REMINDERS

Seed Treatment
Plant Growing
Spraying Schedule

By
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Bordeaux Mixture

Bordeaux is made from copper sulphate (bluestone, blue vitriol), lime, and water. The first figure of a bordeaux formula always indicates the amount of copper sulphate in pounds, the second figure the amount of hydrated lime in pounds, and the third figure the amount of water in gallons.

Early Sprays—4-2-100 Bordeaux

4 pounds copper sulphate
2 pounds hydrated lime
100 gallons water

Late Sprays—8-4-100 Bordeaux

8 pounds copper sulphate
4 pounds hydrated lime
100 gallons water

"Instant Bordeaux" Method

A method of preparation recently coming into extensive use calls for pulverized, powdered, or sugar copper sulphate. This does not have to be made up into a stock solution as it dissolves quickly, with agitation, in the sprayer tank. A satisfactory procedure follows:

1. Fill sprayer tank about one-fourth to one-third full with water.
2. With the agitator in operation, place the copper sulphate on the tank screen and wash through, continuing to add water until the tank is nearly full. Allow about two minutes for the copper sulphate to dissolve.
3. Place hydrated lime on the tank strainer and wash through, or mix with water in pail or tub and pour through tank strainer.
4. Add calcium arsenate or nicotine sulphate at this time if either is to be used. Fill tank with water and apply. Keep agitator in operation continuously after copper sulphate is added.

Seed Treatments

Soak the seed for five minutes in a one to 1,000 solution of corrosive sublimate, (1 oz. in 7½ gallons), then wash for 15 minutes in running water. Corrosive sublimate solution should not be put into metal containers and the solution should be used only once. After one batch of seeds has been soaked, the germicidal action of the solution is greatly reduced and a fresh solution must be used for each batch of seeds. For ease in handling during the disinfection process, the seeds may be placed in a cloth bag large enough to allow for the swelling of the seeds. During the treatment the seeds should be stirred with a stick to remove air bubbles and insure the wetting of the seed coats. After the washing process the seeds should be spread out to dry in a well-ventilated place. After seeds are dry, to prevent damping-off, dust seed with Semesan or red copper oxide. (See directions on container.)

Poison Bran Bait for Cutworms

Mix very thoroughly
1 bushel of bran
½ gallon of cheap molasses
Small quantity water
1 pound white arsenic or 1 quart arsenite of soda (not arsenate of lead nor arsenate of calcium) or 1 pound paris green.

When thoroughly mixed, stir in enough amyl acetate (banana oil) to scent the mass slightly—about two to three ounces, at the most.

Apply on average 30-40 pounds wet bait per acre.

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MUSKMELON REMINDERS

SANITATION

1. Clean out coldframes thoroughly or move frames to new location.
2. Eradicate all milk-weed, poke weed, ground cherry, wild cucumber, catnip, as these are hosts or carriers of mosaic.
3. Remove trash and rubbish in and around field where squash bugs lurk.
4. Plant melons on ground not used for this or related crops last year.

SEED

1. One pound of seed will provide plenty of strong plants for one acre and allow for thinning in the bands.
2. The muskmelon is an insect-pollinated crop and a high percentage of cross-pollination always occurs.
   A. Therefore obtain a good strain of any variety you select.
   B. The two leading varieties are Hearts of Gold and Honey Rock. Other varieties used are Bender's Surprise, Hales' Best and Superfecto.
3. Several serious leaf diseases are carried on the seed. These are: Anthracnose, Angular Leaf Spot, and Macrosporium Leaf Spot.
   A. Treat seed one week before planting with corrosive sublimate (1-1,000, i. e. in a solution made by dissolving 1 ounce of the poison in 1,000 ounces or about 7½ gallons of water) for five minutes, then wash in fresh water for 15 minutes. Dry seed thoroughly. (For details see back cover.)
   B. After seed is dry, dust with Semesan or red oxide of copper to prevent damping-off.

PLANT GROWING

1. Use only well decomposed, fibrous compost to fill bands.
2. Apply a 2-12-6 fertilizer to compost at rate of one pound to each well filled wheelbarrow.
3. Fill band with compost and pack to within one inch of top.
4. Place two to three seed (for a single plant per band) in band; then cover with one-half inch of fresh sand.
5. Size of Wood Veneer Bands
   A. For growing one plant per band in three and one-half weeks, use a 3x3x4-inch band.
   B. For growing two plants per band in four weeks, use a 4x4x4-inch band.
   C. For growing two plants per band in four and one-half to five weeks, use a 4½x4½x5-inch band.
6. To prevent damping-off of seedlings, sprinkle with a solution of Semesan or red copper oxide (1 ounce in 3 gallons of water).
7. Water only on mornings of sunny days. One good soaking when bands are dry is much better than frequent sprinkling.
8. Watch ventilation—never allow moisture to condense on the underside of glass or leaves of plants—this is ideal for development of leaf diseases.
   A. Try to hold the bed at 80-85°F. during the day and about 65-70°F. at night.

PLANTING DISTANCES, NUMBER OF BANDS AND SASH REQUIRED PER ACRE

Field Spacing	Number of Bands Required Per Acre	*Number of Sash Required Per Acre Using 3" Bands	*Number of Sash Required Per Acre Using 4" Bands
6 x 4 feet	1815	6.3	11.2
6 x 4½ "	1613	5.6	10.0
6 x 5 "	1452	5.0	9.0
6 x 6 "	1210	4.2	7.5
7 x 4 "	1556	5.4	9.6

*No allowance made for rejection of poor plants or for losses due to various causes.

9. When thinning, remove all seedlings that show mottled yellow-green leaves (Mosaic disease).
10. If striped beetles are present in coldframes dust with gypsum, 19 parts to one part calcium arsenate dust before taking to the field.
11. Spray plants in bed with 4-2-100 bordeaux about three to five days before field setting. (See back cover.)

FIELD OPERATIONS

1. On light soils apply five to eight tons of manure well mixed with soil in hills or rows.
2. Do not set plants in the field until warm weather arrives.
3. Apply 300 pounds per acre of 4-16-8, 4-16-4, or 2-12-6 in strips 2½ inches from the plant, on each side of the hill, 3½ to 4 inches deep immediately after plants are set. This can be applied with the fertilizer attachment on the cultivator. If the soil is dry, use only 150-200 pounds fertilizer.
   A. Make application of 200 pounds of nitrogen fertilizer plus 50 pounds of muriate of potash three to four weeks later at time of cultivation. At this time the fertilizer band should be from 10-16 inches from the hill.
   B. If vines are not making normal growth, and if the weather is favorable, make a second nitrogen and potash application the latter part of July.
4. Insect and Disease Control.
   A. Spread poison-bran bait not later than night before planting to rid field of cutworms. (See back cover for formula.)
   B. Have plants covered with calcium arsenate-gypsum (1-19) dust when the plants go into the field or cover immediately after setting. It is very important to keep plants covered with this dust—if it rains apply dust immediately afterward.
   C. Spraying program—if a sprayer capable of 300 pounds pressure is available:
      1. Shortly before perfect blossoms appear spray with a 8-4-100 bordeaux plus 2 pounds of calcium arsenate. (For details see back cover.)
         a. Apply with 300 pounds pressure (make leaves vibrate); 100 to 125 gallons are required to cover thoroughly one acre at this time.
         b. Frequency of applications depends on weather conditions but five to seven applications may be necessary.
         c. For third and latter applications 8-4-100 bordeaux is recommended.
      2. If aphids are present add one pint of nicotine sulphate to each 100 gallons of bordeaux, or use a 4 per cent nicotine dust.