ANTHRACNOSE (Colletotrichum lindemuthianum),

ALTERNARIA BLIGHT (Alternaria spp.),

RUST (Phakospora spp.):

Azoxystrobin

Quadris, 6.2 - 15.4 fl oz every 7 - 14 days. Follow guidelines for resistance management.

Peppers

Amount of chemical formulation to apply per acre (unless otherwise directed). Apply no closer to harvest than number of days given in parentheses. (RUP) = Restricted Use Pesticide. Consult bulletin E-959 for pictures of insects, life history and damage. See current Vegetable Crop Advisory Team Newsletter for up-to-date information on pest status and control. (Visit www.ipm.msu.edu/vegCAT.htm or use the order form in the back of the book to subscribe.)

NEMATODES

Northern root-knot nematodes can reduce pepper yields. Fields with soil or root problems of undetermined cause should be tested for nematodes (see Appendix C). If the plant parasitic nematode is present at a population density above the economic threshold for peppers, crop rotation or application of a nematicide is recommended. The following nematicides are suitable for control of root-knot nematodes in pepper production.

Correct soil moisture, temperature and soil structure is needed for effective control of soil-borne pests. Special care is needed to seal fumigants in target zone for required time periods. This can be achieved by soil packing or by immediate tarping.

FALL SOIL TREATMENT (BROADCAST): 1,3-D

Telone II, 25 gal/A (muck soil), 9-18 gal/A (mineral soil).

Fumigate in the fall when soil temperatures at 6-inch depth are above 50F. Inject the fumigant to soil depth of 8 inches and lightly seal the soil immediately after application. Use soil fumigants only as directed on the label. In some limited situations soil fumigants can be applied in the spring in Michigan.

SOIL INJECTION:

Metam Sodium

Vapam HL, 37.5 to 75 gal/A (use higher rate for muck soil). Inject with injector, shanks spaced 5 inches apart at a depth of 4 to 10 inches. Roll and irrigate treated surfaces to prevent escape of gas.

TRANSPLANT WATER TREATMENT:

Apply as needed.

Vydate L, 2 pt in at least 200 gallons of water. Do not apply during periods of slow plant growth, such as when temperatures are below 45F. (RUP)

This treatment should be followed by broadcast or band applications using ground equipment at 1 gal/A in 20-50 gal water. Response is usually best if application is made to seedling plants from flag leaf to 2 or 3 true leaves.

CHEMIGATION TREATMENT:

Metam Sodium

Vapam HL, 37.5 to 75 gal/A (use higher rate for muck soil). Apply with an irrigation system. Soil should be moist prior to treatment See Bulletin E-2099. Do not plant for 14 to 30 days after treatment (the wetter the soil, the longer the waiting period).

INSECTS

AT PLANTING OR TRANSPLANTING:

APHIDS: For early season control.

Imidacloprid

Admire Pro, 7 - 14 fl oz. (21 days) Consult label for application methods, rotation restrictions and other requirements

Nuprid 2 F, 16 to 24 fl oz. (21 days)

or

Platinum, 5 to 11 fl oz. (30 days) Apply as in-furrow spray or narrow surface band, as a post seeding, transplant or hill drench, in trickle or drip irrigation, or shanked into root zone after establishment or transplanting.

Venom, 5 to 6 oz. (21 days) See label for application methods.

FOLIAR TREATMENT:

FLEA BEETLE:

Actara, 2 to 3 oz. (0 days) Do not apply if a neonicitinoid was used at planting. Do not exceed 11 oz/acre per season. or

Asana XL, 5.8 to 9.6 oz. (7 days) (RUP)

or Carbaryl

Sevin 80 S (1 1/4 lb) or Sevin XLR Plus (1 qt) (3 days) or

Endosulfan 3 EC, 2 pt. (4 days) Consult label for rotation restrictions.

or

Permethrin. Bell peppers only.

Ambush 25 W, 6.4 to 12.8 oz ,. (3 days) (RUP)

Perm-UP 3.2 EC (4 to 8 oz) or *Pounce* 25 WP (6.4 to 12.8 oz) or *Pounce* 3.2 EC (4 to 8 oz) (3 days) (RUP)

or Venom, 1 to 4 oz. (1 day)

or

Warrior with Zeon Technology, 1.3 to 3.8 fl oz. (5 days) (RUP)

or Mustang Max, 2.2 to 4.0 oz. (1 day) (RUP)

or Lambda-cyhalothrin

Lambda-Cy, Proaxis, 2.6 to 3.8 fl oz. (5 days) (RUP)

or , Hero, 4 to 10.3 oz. (7 days) (RUP)

Hero, 4 to 10.3 oz. (7 days) (RU or

Bifenthrin

Bifenture EC, 2.1 to 6.4 oz. (7 days) (RUP)

*Materials marked with an asterisk are particularly recommended for problem infestations.