The Vermont Agency of Commerce and Community Development developed guidance about which types of agricultural operations are currently allowed to operate during the pandemic. See: https://accd.vermont.gov/content/stay-home-stay-safe-sector-specific-guidance

While farming and supplying the agricultural industry for ongoing food production is essential, providing plants to household consumers is not deemed essential. Businesses are not currently allowed to provide those services with any in-person contact with or between employees and/or customers.

Farm stands and CSAs are allowed to operate but only with appropriate physical distancing practices in place. Food retail is also required to use phone or online orders and delivery or curbside pick-up to the extent possible. Here is guidance for these and other “essential” retail operations: https://accd.vermont.gov/sites/accdnew/files/documents/Stay-Home-Stay-Safe-Guidance-for-Retailers.pdf

Farmers’ markets are currently NOT essential services, so they are not permitted to operate with person-to-person contact. The State continues to review how markets may be able to operate in the near future.

Greenhouses and nurseries: 1) those used to grow and/or sell food or crops are engaged in agriculture and/or farming may continue limited in-person business; 2) greenhouses may sell to farmers to support commercial agricultural production; 3) those who sell to non-farm consumers may care for and maintain plants provided they avoid in-person contact and no more than one individual is in the facility at a time; 4) Ornamental and vegetable retail operations to consumers are currently not deemed essential, and businesses engaged in these activities must suspend in-person operations.

Sales of farm or other products that are not available through in-person retail sales can continue if they use online or phone orders, with curbside pick-up or delivery that eliminates person-to-person contact. At this writing it appears that farmers’ markets that remote ordering systems are still considered ‘gatherings’ and thus not allowed. The State continues to review what practices may be allowed as the weather warms.

Businesses can request additional guidance by filling out a form at: https://bit.ly/covid-vt-business-operations
LAB SERVICES AVAILABLE AT THIS TIME
Becky Maden, UVM Extension

Here is an update on lab and diagnostic services available during COVID-19 as of 4/13/20. Please check with the individual lab before sending samples to make sure nothing has changed. **UVM Agricultural and Environmental Testing Lab** is open to receive soil samples BY MAIL ONLY. Turnaround time is 2-3 weeks. Standard field soil and pre-sidedress nitrate tests (PSNT) are available at this time. **UVM Plant Diagnostic Clinic** is open. Please send all pest or disease related samples either by photo or mail to Ann Hazelrigg (mail samples are delayed, but she will receive them). Give her a heads-up at ann.hazelrigg@uvm.edu if you are sending something so she knows to contact mail services.

**UMaine Soil Testing Lab** is open to receive mail samples. Standard field soil tests, high tunnel soil tests, compost, and tissue analysis are available.

**Dairy One** (in New York state) is open. Standard field soil tests, manure, forage, tissue analysis available.

The following labs are currently closed: **UMass**, **UNH**, and **Cornell** (for soil health tests).

UVM EXTENSION AG BUSINESS EDUCATORS AVAILABLE FOR CONSULTING

If your farm is under pressure to plan for COVID-19 disruption, our educators are available for business coaching and can assist with locating resources. We can help with critical business decision-making, assessing changes to markets, financial planning and other issues facing your enterprises. Contact one of our educators by email or leaving a voicemail to make an appointment:

Beth Holtzman (Early Stage/Homestead Farms): Beth.Holtzman@uvm.edu 802-476-2003 x204.

Betsy Miller (Farm Business): 802-447-7582 x252 Betsy.Miller@uvm.edu *available for Friday appointments only

Chris Lindgren (Forest and Maple Business): 802-773-3349 x274 Christopher.Lindgren@uvm.edu

Mark Cannella (Farm and Maple Business): 802-476-2003 x207 Mark.Cannella@uvm.edu

Mary Peabody (Farm Labor Issues): 802-598-4878 (call or text) Mary.Peabody@uvm.edu

Tony Kitsos (Farm Business): 802-524-6501 x440 Tony.Kitsos@uvm.edu

Zac Smith (Farm Business and Ag Business Marketing): 802-524-6501 x446 Zachary.M.Smith@uvm.edu
APRIL 30 DEADLINE TO SUBMIT CAPS PRODUCE SAFETY PLAN

Community Accreditation for Produce Safety is the Vermont Vegetable and Berry Grower Association’s food safety accreditation program, see: https://practicalproducesafetyvt.wordpress.com/

Designed by growers and administered by UVM Extension, it is now in its seventh year, and is transitioning to a new and improved web platform at: https://vvbga.org/produce-safety-caps

Last year, 125 farms earned accreditation by writing or updating their farm’s food safety plan, then uploading the straightforward information to show that they implemented it. Another 50 or so farms simply used the CAPS site to write a plan, but decided not to get accredited. Either way, CAPS can help you reduce risk, improve efficiency, and reinforce customer confidence in your practices. To use CAPS, you must be a VVBGA member ($70 per farm per year). The accreditation fee is only $100, thanks to financial support from grants and gifts. Scholarships are available. To join the VVBGA and enroll in CAPS, go to: https://2020vvbga.eventbrite.com

If you would like to preview the CAPS system prior to enrolling, or if you have other questions, contact Hans Estrin at hestrin@uvm.edu or 802-380-2109.

MUMMYBERRY MANAGEMENT IS ABOUT PREVENTION
(adapted from Michigan State Univ. and others)

About the time forsythia blooms you should scout under your blueberry bushes for mummy berry mummies. They look like tiny, black pumpkins about 1/3 inch in diameter and may be partially embedded in the soil or underneath leaf litter. Germinated mummies have small brown finger-like projections that develop into little mushrooms (apothecia) that look like small brown trumpets or goblets. There can be anywhere from one to six or seven apothecia on a mummy. Germination is heavily influenced by soil moisture: in a wet spring, there may be up to 40 percent germination and in dry fields or dry years, only about 5-10 percent of mummies may germinate. Mummies can survive at least two years, but once they germinate, they die.

Apothecia can become dime-sized under the right conditions and can discharge millions of spores into the air per day. The greater the number of ascospores released the higher the infection risk, so minimizing their number is important. The wettest sites or areas in the field are at the highest risk. Ascospores are windborne and theoretically can travel at least a mile on the wind but most travel only 30-100 feet from the source.

There are several ways to minimize apothecia development. A two or three- inch layer of sawdust or other mulch applied anytime in the dormant season can prevent apothecial emergence. Destroy developing apothecia by disrupting the soil under plants and/or in alleyways can reduce sporulation. Apothecia mature on average over 17 days (from 10 to 28 days), so multiple disturbances are needed. Disturbance can be by raking, cultivating or chain dragging soil.
You can cultivate to pile soil/mulch towards the base of the bushes (where mummies often collect) and then rake soil back into the rows later in spring after apothecia are gone. Flaming may also be useful. Lime sulfur at 8 gal/100 gal water directed to the soil surface may destroy some apothecia. A ground spray of concentrated liquid urea may burn apothecia if they are present. Application of 50% urea at a rate of 200lbs/A prior to budbreak may decrease the number of viable apothecia. For more information, see:

https://pnwhandbooks.org/plantdisease/host-disease/blueberry-vaccinium-corymbosum-mummy-berry

https://www.apsnet.org/edcenter/disandpath/fungalasco/pdlessons/Pages/MummyBerry.aspx

Organic or conventional preventative fungicides may be needed to control shoot strike (primary infection) if spores were released from mummies. Apply at budbreak especially if weather is conducive to infection. About 45-65 degrees F and 8 hours or more of leaf wetness is high risk. Frost/freeze events also predispose tissue to infection. Repeat fungicide applications at recommended intervals if weather continues to promote infection. If shoot strikes are controlled well (you can scout fields to confirm this) and no shoot strikes are present during the bloom period, the risk of fruit infection is minimal. If not, sprays may be needed to protect against secondary infection of flowers/fruit. Be careful with fungicide applications during bloom: spray at night when bees are not active. For more information on fungicide options see:
https://ag.umass.edu/fruit/ne-small-fruit-management-guide/highbush-blueberries/diseases

WHEN TO REMOVE STRAWBERRY MULCH
(adapted from Bob Tritten, Michigan State University)

To determine the best timing of straw removal, look for the beginning of leaf growth under the mulch; inspect fields several times a week during the annual spring ‘green up’ period. Randomly pick a half dozen spots in your earliest variety and earliest site and gently pull the straw off of a section of row a few feet long. If you see new leaves (they may be a yellow color) that are beginning to emerge from the crown of the plant, the strawberries are ready to begin growth for the season and the straw needs to be removed soon. You can then recover these short sections of row. Concentrating on the earlier fruiting strawberries will help to pinpoint timing of straw removal. Move into the later varieties in the patch to do this sampling. Avoid looking only at the ends of rows; these berries are always earlier than the rest of the planting.

The condition of your soil also is a factor in determining when to remove the straw mulch. If you are on heavy soil and your soil has not dried yet, either wait for a cold morning when there is a crust on the soil surface to reduce soil compaction or simply wait a few days for your soil to dry out more. Lastly, before you remove straw, check the weather forecast. If cold weather is predicted, you should consider delaying a few days.
The earlier you remove the straw mulch, the earlier fruit will mature, which may necessitate more frost protection. For early springs, growers may delay straw removal in order to delay flowering, and harvest. In late springs, there is a danger of leaving straw on too long. A study conducted years ago (by Bertie Boyce at UVM) in New England compared straw removal over a six-week period. The highest yields came from plants that were uncovered earliest in spring; the later the straw was removed, the more yield was reduced.

A light layer of straw, about an inch thick, can be left on the plants. Leaves and flowers can grow up through this thin layer and it may help reduce disease problems later in the season and will also help prevent some weed seeds from germinating if bare soil is exposed to sunlight. Lastly, mulch removal just prior to a rain event helps the plants respond well and keeps the mulch in place.

HIGH TUNNEL SOIL TESTING REMINDER

In established tunnels with relatively high organic matter (compared to the field) it is helpful to use the Saturated Media Extract (SME) test, as well as the regular field soil test (modified Morgan's extract.) The SME test measures water-soluble, immediately available nutrients and the field soil test measures nutrients in reserve, extracted with a weak acid. Both tests measure soil pH and organic matter, but the SME test results also include soluble salts and available N which are important measures for greenhouse soils and potting mixes.

Make sure your mix or soil has been moist and warm (room temperature) for at least a week. Send a pint (not a cup as for field soil test) to the soil test lab. The UMaine soil test lab runs both these tests for $30, calling it the "long-term high tunnel test." See: http://anlab.umesci.maine.edu/

HOMEMADE FACEMASK OPTIONS

Chris Callahan, UVM Extension Agricultural Engineer

Wear a Face Mask (NEW). The FDA and CDC are now recommending the use of simple cloth face masks as a voluntary public health measure in public settings where other social distancing measures are difficult to maintain. These are not meant to be N95 masks, and they are not meant to protect the wearer. They are meant to limit the transmission of COVID-19 from the wearer who may be asymptomatic. Consider making one of several homemade cloth masks (see below) and distributing to employees who may need them. More info available from Penn State.

No Sew Options.

CDC: How to Make your Own Face Covering
https://www.youtube.com/watch?v=tPx1yqvJgf4&feature=youtu.be

Japanese Creations: Pleated Face Mask with Handkerchief
Easy Sewing, Gets the Job Done.

New York Times: How to Sew a Face Mask

Deaconess Face Mask: Two-layer cotton, sewn, with elastic straps.
https://www.deaconess.com/SpecialPages/How-to-make-a-Face-Mask

More Difficult to Make but Better Fit.

Unity Point Olson Mask:

Dr. Xiaoting Chen’s Design: Cloth outer, microfiber insert with tied straps.
https://mustsharenews.com/cloth-face-mask/

Fu Face Mask: Free Sewing 1 Page Pattern
https://freesewing.org/blog/facemask-frenzy/