

# Comparison between CAN/CGSB-32.310-2015 amended 2018 and CAN-CGSB-32.310-2020

# Section 7.2, 7.3, 7.6 – Maple products, Mushroom production, Wild crops

Changes are highlighted in yellow

# www.organicfederation.ca

## CAN/CGSB-32.310 - 2015

## CAN/CGSB-32.310 - 2020

| 7.2 Maple products   | 7.2 Maple products   |
|--|--|
| <b>7.2.1</b> The standards for maple production also apply to syrup production in other tree types, such as birch.   | <b>7.2.1</b> The standards for maple production also apply to syrup production in other tree types, such as birch.   |
| <b>7.2.2</b> Organic maple products shall be from production units managed in accordance with this standard.   | <b>7.2.2</b> Organic maple products shall be from production units managed in accordance with this standard.   |
| <b>7.2.3</b> In the production of maple syrup or products made from maple syrup, care shall be taken to ensure that the characteristic maple flavour predominates. This standard applies to all stages of production and preparation — the maintenance and development of the sugar bush, collecting and storing sap, converting sap to syrup, making products out of syrup, washing and sterilizing equipment, and storing finished products. | <b>7.2.3</b> This standard applies to all stages of production and preparation — the maintenance and development of the sugar bush, collecting and storing sap, converting sap to syrup, making products out of syrup, washing and sterilizing equipment, and storing finished products.   |
| <b>7.2.4</b> The production of maple syrup shall be characterized by good management practices of the sugar bush and its ecosystem. Development and maintenance shall focus, over the long term, on preservation of the sugar bush ecosystem and improvement of tree vigour.   | <b>7.2.4</b> The production of maple syrup shall be characterized by good management practices of the sugar bush and its ecosystem. Development and maintenance shall focus, over the long term, on preservation of the sugar bush ecosystem and improvement of tree vigour.   |
| <b>7.2.5</b> Tapping practices shall minimize risk to the health and longevity of the trees.   | <b>7.2.5</b> Tapping practices shall minimize risk to the health and longevity of the trees.   |
| <b>7.2.6</b> Equipment and techniques used to collect and store sap shall lead to a prepared product of the highest possible quality. Equipment shall be in good condition and shall be used according to the manufacturer's instructions.   | <b>7.2.6</b> Equipment and techniques used to collect and store sap shall lead to a prepared product of the highest possible quality. Equipment shall be in good condition, shall be composed of materials suitable for use in the manufacture of food products, and shall be used according to the manufacturer's instructions. |
| <b>7.2.7</b> During conversion of sap to syrup, the sap can take on the odour of anything it comes into contact with. Therefore, care shall be taken to avoid denaturing the product during preparation. The   | <b>7.2.7</b> During conversion of sap to syrup, the sap can take on the odour of anything it comes into contact with. Therefore, care shall be taken to avoid denaturing the product during  |

| use of technology that is likely to alter the intrinsic qualities of the product is prohibited.   | preparation. The use of technology, such as magnetization, that is likely to alter the intrinsic qualities of the product is prohibited.  |
|---|---|
| 7.2.8 Transition  | 7.2.8 Transition  |
| This standard shall be fully applied on a production unit for at least 12 months before the harvest of sap may be considered organic. Prohibited substances, such as fertilizers or synthetic pesticides used in forest management, shall not have been used for at least 36 months preceding the first harvest. Parallel production is prohibited.   | This standard shall be fully applied on a production unit for at least 12 months before the harvest of sap may be considered organic. Prohibited substances shall not have been used for at least 36 months preceding the first harvest. Parallel production is prohibited.   |
| NOTE The Canadian Organic Products Regulations require operators to document that they have not used prohibited substances. The Regulations also require that, in the case of an initial application for an organic certification of maple products, the application must be filed 15 months before the day on which the product is expected to be marketed. During that period of time, compliance with this standard will be assessed by the certification body and this assessment must include at least one inspection of the production unit, during production, in the year before maple products are eligible for certification. These or similar regulatory requirements may eventually be found in new regulations that would replace the Organic Products Regulations, 2009. Current regulations should be consulted to ensure accuracy of regulatory requirements. | <ul> <li>NOTE Part 13 Organic Products of the Safe Food for Canadians Regulations requires that the application for the organic certification of maple products be filed at least 15 months before the day on which the food is expected to be sold.</li> <li>During that period of time, compliance with this standard will be assessed by the certification body and this assessment must include at least one inspection of the production unit, during production, in the year before maple products may be eligible for certification and one inspection, during production, in the year maple products are eligible for certification.</li> </ul> |
| 7.2.9 Sugar bush development and maintenance  | 7.2.9 Sugar bush development and maintenance  |
| 7.2.9.1 Plant diversity   | 7.2.9.1 Plant diversity   |
| The operator shall encourage species diversity in the sugar bush, in particular, companion species to the sugar maple. Companion species should represent a minimum of 15% of the volume of wood within the sugar bush. If companion species represent less than 15%, their growth shall be encouraged. Systematic clearing of undergrowth and brush is prohibited, even if growth is abundant. However, vegetation may be removed to clear paths and to facilitate movement.   | The operator shall encourage species diversity in the sugar bush, in particular, companion species to the sugar maple. Companion species should represent a minimum of 15% of the volume of wood within the sugar bush. If companion species represent less than 15%, their growth shall be encouraged. Systematic clearing of undergrowth and brush is prohibited, even if growth is abundant. However, vegetation may be removed to clear paths and to facilitate movement.   |
| 7.2.9.2 Thinning  | 7.2.9.2 Thinning  |
| When it is necessary or when required by the forest administrator, thinning of the sugar bush shall be performed according to current good management practices, both public and private, and shall be evenly distributed throughout the sugar bush.  | When it is necessary or when required by the forest administrator, thinning of the sugar bush shall be performed according to current good management practices, both public and private, and shall be evenly distributed throughout the sugar bush.  |
|   |   |

#### 7.2.9.3 Tree protection

If livestock (for example, beef or dairy cattle, pigs or domestic deer) could harm sugar trees, access to the bush is prohibited in order to preserve plant diversity and the growth of young trees. Pipeline networks shall be installed so as not to wound or harm the growth of trees.

#### 7.2.9.4 Fertilization

Fertility recommendations and applications shall be based on observed, diagnosed and documented deficiencies. Soil amendments permitted for maple production include wood ash, agricultural lime and non-synthetic fertilizers listed in Table 4.2 of CAN/CGSB-32.311.

#### 7.2.9.5 Pest control

Knowledge and understanding of sugar bush and preparation facility pests, their habits, and solutions that maintain the bush ecosystem, are the preferred basis for pest control. Within the sugar bush, substances listed in Table 4.3 of CAN/CGSB-32.311, are permitted for disease and insect control. Within preparation facilities, mechanical and sticky traps are permitted for rodents and other destructive pests, as are natural repellents listed in Table 8.2 of CAN/CGSB-32.311. If an infestation occurs, pests may be hunted. Poisons of any kind are prohibited.

#### 7.2.9.3 Tree protection

If livestock (for example, beef or dairy cattle, pigs or domestic deer) could harm sugar trees, livestock access to the bush shall be prohibited in order to preserve plant diversity and the growth of young trees. Pipeline networks shall be installed in a manner that shall not injure nor harm the growth of trees.

## 7.2.9.4 Fertilization

Fertility recommendations and applications shall be based on observed, diagnosed and documented deficiencies. Soil amendments permitted for maple production include wood ash, agricultural lime and fertilizers listed in Table 4.2 (Column 1) of CAN/CGSB-32.311.

## 7.2.9.5 Pest control

Knowledge and understanding of pests (in the sugar bush and preparation facility), their habits, and solutions that maintain the bush ecosystem, are the preferred basis for pest control. Within the sugar bush, substances listed in Table 4.2 (Column 2) of CAN/CGSB-32.311 are permitted for control of pests including diseases and insects. Within preparation facilities, mechanical and sticky traps are permitted for rodents and other destructive pests, as are natural repellents listed in Table 8.2 of CAN/CGSB-32.311. If an infestation occurs, vertebrate pests may be hunted. It is prohibited to use poisons of any kind to control vertebrate pests.

| 7.2.10 Tapping  | 7.2.10 Tapping  |
|---|---|
| 7.2.10.1 Tree diameter and number of taps   | 7.2.10.1 Tree diameter and number of taps   |
| Table 7 indicates the maximum number of taps a healthy maple can support, based on its chest height diameter (CHD); CHD is the diameter measured at a height of 1.3 m (4.3 ft) above the soil surface. A tree shall not have more than three tap holes. | diameter (CUD). CUD is the diameter measured at a height of 1.2 m (1.2 ft) should the soil surface. A |

Table 7 — Maximum number of taps per healthy maple tree

| Diameter measured at a height of 1.3 m (4.3 ft) above the soil surface | Maximum number of taps |
|--|------------------------|
| Less than 20 cm (8 in.)  | 0                      |
| 20 to 40 cm (8 to 16 in.)  | 1                      |
| 40 to 60 cm (16 to 23.6 in.)   | 2                      |
| 60 cm (23.6 in.) or greater  | 3                      |

## 7.2.10.2 Depth and diameter of tap holes

Depth of tap holes shall be no more than 4 cm (1.6 in.), not counting the bark, or 6 cm (2.4 in.), if the measurement is made from the surface of the bark. Diameters shall not be greater than 11 mm (0.4375 in.). If a tree is diseased, infested with pests, decaying or tap holes are not healing properly, stricter standards shall be implemented: the number of taps per tree shall be reduced to 2 where 7.2.10.1 allows 3, and 1 where 2 are allowed. When the chest height diameter is less than 25 cm (~9 7/8 in.), tapping is prohibited. If a majority of trees are affected, regular tapping standards apply. However, spouts with a smaller diameter shall be used or trees, in the affected area, shall not be tapped.

## 7.2.10.3 Disinfection of tap holes and tapping equipment

The use of germicide, including paraformaldehyde tablets or denatured alcohol (a mixture of ethanol and ethyl acetate), in tap holes and on tapping equipment is prohibited. Food-grade ethyl alcohol may be sprinkled onto spouts and drill bits during tapping.

## 7.2.10.4 Over-tapping, renewing the tap and removal of spouts

The practice of retapping a previously tapped tree during the same season or double tapping is prohibited. Renewing the same hole is allowed if the diameter is not changed. To allow trees to heal,

Table 7 — Maximum number of taps per healthy maple tree

| Diameter measured at a height of<br>1.3 m (4.3 ft) above the soil surface | Maximum number of taps |
|---|------------------------|
| Less than 20 cm (8 in.)   | 0                      |
| 20 to 40 cm (8 to 16 in.)   | 1                      |
| 40 to 60 cm (16 to 23.6 in.)  | 2                      |
| 60 cm (23.6 in.) or greater   | 3                      |

## 7.2.10.2 Depth and diameter of tap holes

Depth of tap holes shall be no more than 5 cm (1.9 in.) from the surface of the bark for trees with a diameter smaller than 25 cm (9.8 in), or 6 cm (2.4 in.) from the surface of the bark for trees with a diameter equal or higher than 25 cm (9.8 in). Diameters shall not be greater than 7.93 mm (5/16 in). If a tree is diseased, infested with other pests, decaying, or if tap holes are not healing properly, stricter standards shall be implemented:

- a) The number of taps per tree shall be reduced to 2 where 7.2.10.1 allows 3, and 1 where 2 are allowed.
- b) When the chest height diameter is less than 25 cm (~9 7/8 in.), tapping is prohibited.

If the trees are compromised by injury, insects, diseases or decay, Table 7 of 7.2.10.1 may be used in accordance with the standard, however, spouts with a smaller diameter shall be used or operators shall abstain from tapping.

## 7.2.10.3 Disinfection of tap holes and tapping equipment

Food-grade ethyl alcohol may be sprinkled onto spouts and drill bits during tapping, but sprinkling in tap holes is prohibited. It is prohibited to use any other germicide, such as denatured alcohol (a mixture of ethanol and ethyl acetate) or isopropyl alcohol, in tap holes and on tapping equipment.

## 7.2.10.4 Renewing the tap and removal of spouts

Maple trees shall only be tapped once a year. The practice of retapping a previously tapped tree during the same season or double tapping is prohibited. To allow trees to heal, spouts shall be removed no later than 60 days after the final, seasonal sap flow. Maple trees shall only be tapped during the sugar bush operation period (maple syrup season). Fall syrup production is prohibited.

| spouts shall be removed no later than 60 days after the final, seasonal sap flow. Maple trees shall only be tapped during the sugar bush operation period (maple syrup season).   |  |
|---|--|
| 7.2.11 Collection and storage of maple syrup  | 7.2.11 Collection and storage of maple syrup   |
| 7.2.11.1 Spouts   | 7.2.11.1 Spouts  |
| Spouts shall be made of food-grade materials.   | Spouts shall be made of food-grade materials.  |
| 7.2.11.2 Vacuum collection system   | 7.2.11.2 Vacuum collection system  |
| All parts of the collection system that may come in contact with sap shall be made of materials suitable for use in the manufacture of food products. Pumps shall be well-maintained and used oil shall be collected and disposed of so as to not contaminate the environment.  | All parts of the collection system that may come in contact with sap shall be made of materials suitable for use in the manufacture of food products. Pumps shall be well-maintained and used oil shall be collected and disposed of so as to not contaminate the environment.   |
|   | NOTE It is recommended to recycle all materials of the components of the collection system.  |
|   |  |
| 7.2.11.3 Storage  | 7.2.11.3 Storage   |
| All equipment that may come into contact with sap or its concentrate and filtrates, such as storage tanks, connections and transfer systems, shall be made of materials suitable for use in the manufacture of food products. This also applies to any surface coatings, such as paints. For new installations or replacement purposes, stainless steel storage tanks with tin-lead soldered joints are prohibited. | All equipment that may come into contact with sap or its concentrate and filtrates, such as storage tanks, connections and transfer systems, shall be made of materials suitable for use in the manufacture of food products. This also applies to any surface coatings, such as paints and soldered joints. The use of air injection systems with a forced air blower in sap before, during or after its conversion to syrup is prohibited. |
|   | 7.2.11.4 Collecting with buckets   |
| 7.2.11.4 Collecting with buckets  | Pails or buckets may be made of aluminum or plastic. Galvanized steel is prohibited. Buckets shall be  |
| Pails or buckets may be made of aluminum or plastic. Galvanized steel is prohibited. Buckets shall be covered with a lid. The standards that apply to storage tanks also apply to reservoirs used to transport collected sap.   | covered with a lid. The standards that apply to storage tanks also apply to reservoirs used to transport collected sap.  |
| 7.2.12 Conversion of sap to syrup   | 7.2.12 Conversion of sap to syrup  |
| 7.2.12.1 Sap filtration   | 7.2.12.1 Sap filtration  |
| Sap shall be filtered before processing. The filtration shall not compromise the sap's inherent qualities.  | Sap shall be filtered before processing. The filtration shall not compromise the sap's inherent qualities.   |
| 7.2.12.2 Sap sterilization  | 7.2.12.2 Sap sterilization   |
| Sterilization of sap with ultraviolet radiation or by adding a sterilizer prior to conversion is prohibited.  | Sterilization of sap with ultraviolet radiation or by adding a sterilizer prior to conversion is prohibited.   |
|   |  |

#### 7.2.12.3 Osmosis extraction and membranes

Sap may be concentrated via reverse osmosis. Only reverse osmosis and nano-filtration (ultra-osmosis) membranes are allowed. In the off-season, osmosis membranes shall be stored, in filtrate, in a hermetically sealed container and kept in a frost-free location. Sodium metabisulfite (SMBS) may be added to the filtrate to prevent mould growth. If SMBS is used, the membrane shall be rinsed before next use with a volume of water equal to the hourly capacity of the membrane [for example, 2728 L (600 gal.) of water for a 2728 L/h (600 gal./h) membrane]. Off-site storage of the membrane (for example, by the membrane supplier) shall be documented.

#### 7.2.12.4 Evaporator

Evaporator pans shall be made of stainless steel. They shall be tungsten-inert gas (TIG) welded or soldered with tin-silver solder. Pans made of galvanized steel, copper, aluminum or tin-plated steel are prohibited. Permitted fuels include wood and heating oil. Used oils may be used as a primary or supplementary fuel. Air and environmental quality shall be controlled in the evaporator room. Air injection systems are prohibited.

NOTE In Canada, additional provincial requirements may apply to the use of used oils.

#### 7.2.12.5 Defoamers

Pennsylvania maple wood (*Acer pennsylvanicum*, also known as striped maple or moosewood) and organic vegetable oils, except those with allergenic potential, are the only permitted antifoaming agents.

#### 7.2.12.6 Syrup filtration and other treatments

Organic maple syrup shall not be refined by artificial means, bleached or lightened in colour. Simple filtration via the following methods is permitted: through cloth or paper, a filter press or food-grade diatomaceous earth, or use of silica powder or clay dust with a filter press to remove suspended solids.

#### 7.2.12.3 Osmosis extraction and membranes

Sap may be concentrated via reverse osmosis. Only reverse osmosis and nano-filtration (ultra-osmosis) membranes are allowed. In the off-season, osmosis membranes shall be stored in filtrate, or potable water, in a hermetically sealed container and kept in a frost-free location. Sodium metabisulfite (SMBS) or potassium metabisulfite (PMBS) may be added to the filtrate or potable water to prevent mould growth. If SMBS or PMBS is used, the membrane shall be rinsed before the next use with a volume of water equal to the hourly capacity of the membrane (for example, 2271 L (600 gal) of water for a 2271 L/h (600 gal/h) membrane). Off-site storage of the membrane (for example, by the membrane supplier) shall be documented. Food-grade lubricants are allowed as a lubricant for equipment used in maple production.

#### 7.2.12.4 Evaporator

Evaporator pans shall be made of stainless steel. They shall be tungsten-inert gas (TIG) welded or soldered with tin-silver solder. Pans made of galvanized steel, copper, aluminum or tin-plated steel are prohibited. Air and environmental quality shall be controlled in the evaporator room. Air injection systems with a forced air blower are prohibited in evaporator pans.

#### 7.2.12.5 Defoamers

Only plant-based organic anti-foaming products that have not been chemically altered are permitted. Examples include Pennsylvania maple wood (*Acer pennsylvanicum*, also known as striped maple or moosewood) and organic vegetable oils, except those with allergenic potential.

#### 7.2.12.6 Syrup filtration and other treatments

Organic maple syrup shall not be refined by artificial means, bleached or lightened in colour. Any manipulation on maple syrup carried out in order to mask defects in flavour, mainly that of the bud, is prohibited. Simple filtration via the following methods is permitted: through cloth or paper, a filter press or calcined diatomaceous earth; or use of silica powder or clay dust with a filter press to remove suspended solids. The use of air injection systems with a forced air blower in maple syrup is prohibited.

| 7.2.13 Cleaning of equipment for use in syrup production   | 7.2.13 Clean  | ing of equipment for use  | in syrup production   |
|--|---|---|---|
| 7.2.13.1 Maple sap collection systems, tubing and tanks  | 7.2.13.1 Maple sap collection systems, tubing and tanks |   | s, tubing and tanks   |
| Cleaning shall take place before or after each production season. Permitted sanitation substances include:   |   |   | er each production season. Permitted sanitation substances  |
| a) in-season: for all equipment except tubing, sodium hypochlorite followed by a potable water or filtrate rinse;  | In-season   | Table 8 – Pern<br>For all equipment<br>except tubing                            | <ul> <li>nitted sanitation substances for Maple</li> <li>Sodium hypochlorite</li> <li>Product based on acetic acid, hydrogen peroxide</li> </ul>  |
| b) off-season: for all equipment, sodium hypochlorite or fermented sap followed by a potable water, filtrate or sap rinse, isopropyl alcohol (for tubing only). Other substances are prohibited, including those with a phosphoric acid base.  |   |   | or peracetic acid (followed by rinsing with<br>drinking water or filtrate)  |
|  | Off-season  | For all equipment including tubing  | <ul><li>Sodium hypochlorite</li><li>Fermented sap</li></ul>   |
|  |   |   | <ul> <li>Product based on acetic acid, hydrogen peroxide<br/>or peracetic acid</li> <li>Cleaning shall be followed by rinsing with drinking<br/>water, filtrate or sap before the next season.</li> </ul> |
|  |   | For tubing only   | <ul> <li>Isopropyl alcohol</li> <li>Cleaning shall be followed by rinsing with drinking water, filtrate or sap before the next season.</li> </ul>   |
|  | Other substa  | nces, including those bas   | sed on phosphoric acid, are prohibited.   |
| 7.2.13.2 Osmosis extraction and membranes  |   | osis extraction and men   |   |
| Reverse osmosis units and membranes shall first be cleaned using filtrate, according to the time and temperature recommended by the manufacturer.  | temperature i   | recommended by the ma   |   |
| a) Cleaning during the production season:  | a) C  | <ul> <li>Ieaning during the prodution</li> <li>If after rinsing with</li> </ul> | iction season:<br>warm filtrate (in an open or closed circuit), a Pure Water  |
| <ol> <li>If a Pure Water Permeability (PWP) test indicates that controlled efficiency is less than 85% of<br/>the controlled efficiency recorded at the beginning of the season, a caustic soda-based soap<br/>(NaOH) recommended by the manufacturer for membrane cleaning is permitted.</li> </ol> |   | controlled efficience   | test indicates that controlled efficiency is less than 85% of the<br>y recorded at the beginning of the season, a caustic soda-based<br>mended by the manufacturer for membrane cleaning is               |
| 2) If PWP test results stay below 75% of the efficiency recorded at the beginning of the season  | 2   | -   | stay below 75% of the efficiency recorded at the beginning of   |

the season after the use of a NaOH-based soap, citric acid is permitted.

after the use of a NaOH-based soap, citric acid is permitted.

| 3) Cleaning or a cleaning sequence with substances permitted in 1) and 2), shall be followed by a rinse with clean filtrate or potable water. The rinse volume shall be greater than or equal to 40 times the dead (residual) volume of the unit (total volume of the unit and its components after it is drained).   |  |
|---|--|
| 4) Daily efficiency readings and calculations shall be recorded. Membrane flush water shall be disposed of in a manner that does not harm the environment.  | 4) Daily efficiency readings and calculations shall be recorded. Membrane flush water shall be disposed of in a manner that does not harm the environment.   |
| <ul> <li>b) Cleaning after the production season: Off-season treatment of membranes with citric acid is<br/>permitted. Following the citric acid treatment, the use of acetic acid, peracetic acid, and hydrogen</li> </ul>   | b) Cleaning after the production season: Off-season treatment of membranes with citric acid is permitted. Following the citric acid treatment, the use of acetic acid, peracetic acid, and hydrogen peroxide is permitted.   |
| peroxide is permitted.  | 7.2.13.3 Evaporators   |
| <b>7.2.13.3 Evaporators</b><br>Evaporators may be cleaned with potable water or filtrate at any time. Vinegar or fermented sap may be used at the end of the season.  | At any time, evaporators may be cleaned with potable water or filtrate adding, if necessary, acetic acid<br>or products based on acetic acid, hydrogen peroxide or peracetic acid.<br>Fermented sap may also be used at the end of the season. Double rinsing is mandatory if acetic acid, or<br>if products based on acetic acid, hydrogen peroxide or peracetic acid, are used. The second rinsing shall<br>be done with hot water, hot filtrate or hot sap. |
| 7.2.13.4 Prohibited substances  | 7.2.13.4 Prohibited substances   |
| Substances other than those specified in 7.2.13.1, 7.2.13.2 and 7.2.13.3 are prohibited, including those with phosphoric acid content.  | Substances other than those specified in 7.2.13.1, 7.2.13.2 and 7.2.13.3 are prohibited, including those with phosphoric acid content.   |
| 7.2.14 Food additives and processing aids   | 7.2.14 Food additives and processing aids  |
| Transformation of syrup into maple products (for example, maple butter, sugar and taffy) shall comply with this standard. Boiling with microwaves is prohibited. No other substances shall be added to syrup or maple products during production or preparation, whether to improve the taste, texture or appearance. Cones may be used if they constitute less than 5% of the weight of the final product. | Transformation of syrup into maple products (for example, maple butter, sugar and taffy) shall comply with this standard. Boiling with microwaves is prohibited. No other substances shall be added to syrup or maple products during production or preparation, whether to improve the taste, texture or appearance. Cones may be used if they constitute less than 5% of the weight of the final product.  |
| 7.2.15 Transport, storage and conservation  | 7.2.15 Transport, storage and conservation   |
| Maple syrup not intended for immediate consumption shall be stored in food-grade containers that do not alter the chemical composition or quality of the syrup. Permitted containers include barrels made   | Maple syrup not intended for immediate consumption shall be stored in food-grade containers that do not alter the chemical composition or quality of the syrup. Permitted containers include barrels   |

Maple syrup not intended for immediate consumption shall be stored in food-grade containers that do not alter the chemical composition or quality of the syrup. Permitted containers include barrels made of stainless steel, fibreglass, food-grade plastic or metal with an interior food-grade coating. Reusing single-use barrels is prohibited. Barrels shall carry a unique identification number that is used in all related records. The barrel fill-date shall be recorded.

| 7.3 Mushroom production  | 7.3 Mushroom production  |
|--|--|
| All relevant subclauses in this standard apply to mushroom production where this subclause has no specific requirements, including 5.1.3, 5.1.4, 5.1.6, and 5.1.7. For outdoor production, 5.2.2 also applies.   | All relevant subclauses in this standard apply to mushroom production where this subclause has no specific requirements, including 5.1.3, 5.1.4, 5.1.6, and 5.1.7. For outdoor production, 5.2.2 also  |
| 7.3.1 Production sites and structures  | applies.<br>7.3.1 Production sites and structures  |
| For organic mushrooms or mushroom products, the operator shall manage production units in a manner that ensures substrates and mushrooms do not come into contact with prohibited substances. Substrates shall be produced in accordance with this standard and applicable entries in Table 4.2 of CAN/CGSB-32.311 such as <i>Composting feedstocks</i> and <i>Compost produced on the production unit</i> :<br>a) For indoor facilities, organic mushrooms shall not come into contact with prohibited substances | For organic mushrooms or mushroom products, the operator shall manage production units in a manner that ensures substrates and mushrooms do not come into contact with prohibited substances. Substrates shall be produced in accordance with this standard and applicable entries in Table 4.2 (Column 1) of CAN/CGSB-32.311 such as Composting feedstocks and Compost produced on the production unit: |
| that would compromise the integrity of the crop.   | a) For indoor facilities, organic mushrooms shall not come into contact with prohibited substances that would compromise the integrity of the crop.  |
| b) For mushrooms grown in soil, prohibited substances shall not have been used for at least 36 months before the harvest of an organic crop.   | b) For mushrooms grown in soil, prohibited substances shall not have been used for at least 36 months before the harvest of an organic crop.   |
| c) For new installations or replacement purposes, lumber treated with prohibited substances shall not be used in structures, containers or other surfaces that come into contact with growth substrate or mushrooms.   | c) For new installations or replacement purposes, lumber treated with prohibited<br>substances shall not be used in structures, containers or other surfaces that come into<br>contact with the growth substrate or mushrooms.   |
| 7.3.2 Substrates and growth media  | 7.3.2 Substrates and growth media  |
| 7.3.2.1 Wood substrates  | 7.3.2.1 Wood substrates  |
| Logs, sawdust or other wood-based materials used as substrates shall come from wood, trees or logs that have not been treated with prohibited substances.  | Logs, sawdust or other wood-based materials used as substrates shall come from wood, trees or logs that have not been treated with prohibited substances.  |
| 7.3.2.2 Manure   |  |
| Subclause 5.5.1 applies to manure used in growth substrates (including any non-organic agricultural substances in the manure). Manure shall be composted according to the requirements for soil amendments outlined in Table 4.2 of CAN/CGSB-32.311.   | <b>7.3.2.2</b> Manure<br>Subclause 5.5.1 applies to manure used in growth substrates (including any non-organic agricultural substances in the manure). Manure shall be composted according to the requirements for soil amendments outlined in Table 4.2 (Column 1) of CAN/CGSB-32.311.   |
| 7.3.2.3 Other agricultural substances  | 7.3.2.3 Other agricultural substances  |
| If they are not composted, agricultural substances such as straw, hay or grains used as growth substrate shall be from organic sources. If organic sources are not commercially available, non-organic sources may be used, provided that they are composted according to the requirements for soil amendments outlined in Table 4.2 of CAN/CGSB-32.311.   | If they are not composted, agricultural substances such as straw, hay or grains used as growth substrate shall be from organic sources. If organic sources are not commercially available, non-organic sources may be used, provided that they are composted according to the requirements for soil amendments outlined in Table 4.2 (Column 1) of CAN/CGSB-32.311.                                      |

| 7.3.3 Spawn   | 7.3.3 Spawn   |
|---|---|
| Organic spawn (seed) shall be used. Spawn grown or treated with substances listed in Table 4.3 of CAN/CGSB-32.311 may be used if organic spawn is not:  | Organic spawn (seed) shall be used. Spawn grown or treated with substances listed in Table 4.2 (Column 2) of CAN/CGSB-32.311 may be used if organic spawn is not:   |
| <ul><li>available from within the production unit;</li><li>commercially available.</li></ul>  | <ul><li>a) available from within the production unit;</li><li>b) commercially available.</li></ul>  |
| 7.3.4 Crop pest control and sanitation  | 7.3.4 Crop pest control and sanitation  |
| Preventative disease control measures shall include the following:  | Preventative pest control measures shall include the following:   |
| <ul> <li>removal of diseased materials. Diseased mushroom strains shall be burned, moved at least 50 m<br/>(164 ft) from a production site (if, for example, the diseased logs are kept for research), or<br/>disposed of as recommended by good management practices;</li> </ul>                               | <ul> <li>a) removal of infected materials. Infected mushroom strains shall be burned, moved at least</li> <li>50 m (164 ft) from a production site (if, for example, the diseased logs are kept for research), or disposed of as recommended by good management practices;</li> </ul> |
| <ul> <li>b) sanitation with substances listed in Table 4.3 of CAN/CGSB-32.311;</li> <li>c) cultivation sites that are free of debris from understory and diseased trees;</li> <li>d) cleaning and maintenance of equipment with sanitizers and disinfectants listed in Table 4.3 of CAN/CGSB-32.311.</li> </ul> | b) sanitation with substances listed in Table 4.2 (Column 2) of CAN/CGSB-32.311;  |
|   | <ul> <li>using cultivation sites that are free of debris from understory, diseased trees and trees<br/>infected by other pests;</li> </ul>  |
|   | <ul> <li>cleaning and maintenance of equipment with sanitizers and disinfectants listed in Table</li> <li>4.2 (Column 2) of CAN/CGSB-32.311.</li> </ul>   |
| 7.3.5 Mushroom product preparation  | 7.3.5 Mushroom product preparation  |
| Wherever organic product preparation takes place, 8.1 and 8.2 apply.  | Wherever organic product preparation takes place, Subclause 8.1 and 8.2 apply.  |
| 7.3.6 Facility pest management  | 7.3.6 Facility pest management  |
| Subclause 8.3 applies to pest management practices in and around mushroom facilities.   | Subclause 8.3 applies to pest management practices in and around mushroom facilities.   |
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#### 7.6 Wild crops

**7.6.1** An organic wild plant product shall be harvested from a clearly defined area or production unit. Documented evidence that prohibited substances have not been used for at least 36 months before the harvest of an organic crop shall be available.

**7.6.2** The operator shall prepare an organic plan (see 4.1, 4.2 and 4.3) that includes:

- a) a detailed description of production areas and harvest methods;
- b) management practices that preserve wild species and avoid disturbance of the environment; and
- c) a record keeping system that meets the requirements of 4.4.

**7.6.3** Wild products shall be considered organic on the condition that they are harvested in relatively undisturbed or stable natural settings. A wild plant shall be harvested or picked in a manner that promotes growth and production, and does not damage the environment.

**7.6.4** The production zone for wild crops shall be isolated from contact with prohibited substances by a clearly defined buffer (see 5.2.2). Harvest sites shall be located more than one kilometre (0.62 mi) from potential sources of environmental contamination, such as golf courses, dumps, sanitary landfill sites and industrial complexes.

#### 7.6.5 Wild crop product preparation

Wherever organic product preparation takes place, 8.1 and 8.2 apply.

## 7.6.6 Facility pest management

Subclause 8.3 applies to pest management practices in and around crop facilities.

## 7.7 Organic insects

All the relevant elements of clauses 1-6 in this standard shall apply.

## 7.6 Wild crops

7.6.1 An organic wild plant product shall be harvested from a clearly defined area or production unit. The operator shall provide documentation proving that prohibited substances have not been used for at least 36 months before the harvest of an organic crop.

**7.6.2** The operator shall prepare an organic plan (see 4.1, 4.2 and 4.3) that includes:

- a) a detailed description of production areas and harvest methods;
- b) management practices that preserve wild species and avoid disturbance of the environment; and
- c) a record keeping system that meets the requirements of 4.4.
- **7.6.3** Wild products shall be considered organic on the condition that they are harvested in relatively undisturbed or stable natural settings. A wild plant shall be harvested or picked in a manner that promotes growth and production, and does not damage the environment.
- 7.6.4 The production zone for wild crops shall be isolated from contact with prohibited substances by a clearly defined buffer (see 5.2.2). Harvest sites shall be located more than one kilometre (0.62 mi) from potential sources of environmental contamination, such as golf courses, dumps, sanitary landfill sites and industrial complexes.

## 7.6.5 Wild crop product preparation

Wherever organic product preparation takes place, clauses 8.1 and 8.2 apply.

## 7.6.6 Facility pest management

Clause 8.3 applies to pest management practices in and around crop facilities.

## 7.7 Organic insects

All the relevant elements of clauses 1-6 in this standard shall apply.