Tomato / Pepper / Eggplant

Moderator: Trevor Meachum

9:00 am Invasive Insects: Should Vegetable Growers be Concerned? (OH 2B, 0.5 hrs)
  • Dr. Mike Reinke, Michigan State University Extension

9:30 am PACA: Perishable Agricultural Commodities Act
  • Elizabeth Rumley, The National Agricultural Law Center

10:00 am Pepper Diseases and Their Control (OH 2B, 0.5 hrs)
  • Sally Miller, Ohio State University

10:30 am Pepper Production and Fertility
  • Dr. Timothy Coolong, University of Georgia
Pepper Diseases and Their Control

Great Lakes Expo 2019
Sally A. Miller
Department of Plant Pathology
The Ohio State University, Wooster, OH 44691
miller.769@osu.edu; @OhioVeggieDoc;
Ohio Veggie Disease News u.osu.edu/miller.769

Peppers are subject to a number of bacterial, oomycete, fungal and viral diseases in the Midwest. Recent wet springs and frequent summer thunderstorms in many growing areas have contributed to a high incidence of these diseases.

The most common and important bacterial disease of peppers in the Midwest is bacterial spot (*Xanthomonas euvesicatoria*), although syringae leaf spot (*Pseudomonas syringae* pv. *syringae*) and bacterial canker (*Clavibacter michiganensis* subsp. *michiganensis*) can occur. Bacterial spot is favored by warm, rainy weather, causes lesions on foliage and fruit and defoliation (Figure 1). Syringae leaf spot is favored by cool, wet weather and is often mistaken for bacterial spot but rarely causes as much damage. Fruit spots are not known to occur. Bacterial canker is caused by the same pathogen that causes canker in tomatoes, but the disease is not systemic in peppers and is relatively rare in occurrence. All of these diseases are seedborne, so management has to start before seeds are planted in the greenhouse. Once these diseases become established in the field, it is not possible to control them under conditions that are favorable for the disease, the most critical of which is an overabundance of moisture. Bacterial soft rot (*Pectobacterium carotovorum* subsp. *carotovorum*) is not seedborne but can cause serious damage.

![Figure 1. Peppers with symptoms of bacterial spot (A and B), syringae leaf spot (C), and bacterial canker (D and E).](image)

There are two common diseases of peppers caused by oomycetes: Pythium root rot (*Pythium* spp.) and Phytophthora blight (*Phytophthora capsici*) (Figure 2). Pythium root rot is a soilborne disease that is most common when peppers are transplanted into very wet soil followed by high stress conditions such as high or low temperatures. The roots and sometime crown/lower stem are affected resulting in plants that are stunted and may die. Phytophthora blight is the more common of the two diseases and is also soilborne. *Phytophthora* thrives under conditions of high moisture and high temperature. Like *Pythium*, it produces motile spores (zoospores) that are attracted to plants then form a structure that allows them to infect, and aggressively attack any type of plant tissue. Zoospores are produced in structures called sporangia and can be splashed...
onto leaves, stems and fruits during rain events and overhead irrigation. Phytophthora blight is often seen first in low spots or other poorly drained areas of production fields, but the disease also occurs on well-drained, even sandy soils if the environmental conditions are right.

![Figure 2. Pepper roots with symptoms of Pythium root rot (A); Pepper plant (center) with Phytophthora blight (B); and pepper leaf with Phytophthora blight lesions (C).](image)

There are a number of diseases of peppers caused by fungal pathogens, but most are not a particular problem in the Midwest. The most troublesome pepper disease caused by a fungus in this region is anthracnose (*Colletotrichum acutatum*), an aggressive seedborne disease that mainly affects the fruit (Figure 3). White mold (*Sclerotinia sclerotiorum*) and grey mold (*Botrytis cinerea*) may occur in peppers grown in high humidity environments such as high tunnels or open fields during cool wet or humid weather. Wilt diseases caused by *Fusarium* and *Verticillium* are not common in peppers in this region.

![Figure 3. Anthracnose on pepper fruit (A); white mold on pepper stem (B).](image)

Finally, peppers are susceptible to a number of viruses but fortunately in this growing region they are not particularly common and outbreaks can be prevented. The Tobamoviruses including Tobacco mosaic virus (TMV), Tomato mosaic virus (ToMV) and Pepper mild mottle virus (PMMV) are mechanically transmitted and can be seedborne. Cucumber mosaic virus (CMV) is primarily transmitted by aphids and the Tospoviruses, primarily Tomato spotted wilt virus (TSWV) are transmitted by thrips.

Managing pepper diseases effectively requires a multiple-step, integrated approach.
1. Use Clean Seed
The first step in prevention of seedborne bacterial, viral and fungal diseases is to exclude pathogens from the crop. Obtaining clean seeds should be a first priority. If seeds are purchased, they should be obtained from a reputable producer with a good track record for selling high quality seed. Ideally, the producer will have tested a sample of the seeds for the presence or absence of pathogens. If they have been tested and the results are negative, there is a relatively low risk that pathogens may be present. If they have not been tested, seeds should be treated to kill any pathogens on the surface. If seeds are saved from the previous year’s crop or obtained from a source with an unknown track record, they should always be treated. The Clorox seed sanitizing protocol is effective for all of these pathogens (https://u.osu.edu/vegetablediseasefacts/management/chlorine-seed-treatment/).

2. Choose a Resistant Variety
A number of varieties of bell and other pepper types resistant to the common races of the bacterial leaf spot pathogen are available. A few pepper varieties are resistant to the root rot phase of Phytophthora blight. In general, these varieties are susceptible to the crown rot phase, which affects foliage and fruits. Varieties with moderate to good resistance to Phytophthora blight include Paladin, Aristotle, Declaration, Intruder, Vanguard (bell); Hechicero (jalapeño); and Sequoia (ano). Research is now being conducted to determine if susceptible pepper varieties grafted onto Phytophthora-resistant rootstocks fare better against this disease than non-grafted plants. Many pepper varieties have resistance to TMV and ToMV and these should be selected if possible. Since these pathogens are capable not only of rapid reproduction but also rapid change and adaptation, resistant varieties should never be the sole means of disease management, no matter how tempting it may be to rely on this management strategy alone.

3. Use Pathogen-Free Transplants
The greenhouse environment in which seedlings are produced, if not managed properly, is highly conducive to diseases. The following practices will reduce the threat of diseases: 1) use of new or sanitized plug trays or flats and pathogen-free mixes, 2) sanitizing equipment, installing solid flooring and raising trays from the floor, 3) limiting movement of personnel and equipment between greenhouses, 4) cleaning benches and greenhouse structures thoroughly after the crop; and 5) prohibiting exotic or experimental pepper or tomato varieties, or plants from saved seed, in the same greenhouse with commercial seedlings unless all seeds are sanitized. Pepper seedlings should never be produced in the same greenhouse as ornamental plants, which may be a source of Tospoviruses and the thrips that transmit them. Plants should scouted regularly for thrips and other vectors, and treated with appropriate insecticides if needed. Relative humidity should be low, air circulation should be high and plants should be watered only enough to ensure growth and minimize the risk of drought stress. Surface water (from ponds, lakes, rivers, etc.) or re-circulated water should never be used to irrigate seedlings unless it has been treated (e.g. ozone, chlorine) and is tested regularly. Farmers who purchase transplants from others should ask about their management practices, and visit them during transplant production, if possible.
4. Choose the Best Site and Rotate
Crop rotation is an important strategy that not only reduces disease problems but also affects weed, insect and nutrient management. Crop rotation should be done among crop families; peppers, tomatoes, eggplants, and potatoes are solanaceous plants. Plants in the same crop family often share the same or related pathogens, and thus should never be used as rotational crops with each other. For bacterial leaf spot management, a relatively short rotation of two years out of solanaceous crops is adequate. However, longer rotations are needed for other bacterial, oomycete and fungal diseases. *Phytophthora* produces structures called oospores that can survive for a number of years in the soil. Plan to rotate out of peppers, cucurbits or green beans for 4-5 years if Phytophthora blight has been a problem. Site factors that minimize opportunities for disease development include good drainage and good aeration.

5. Use Appropriate Cultural Practices
There are a number of cultural practices that can help to improve overall plant health and also reduce disease development. Our research has shown that increasing the organic matter content of soil not only improves crop growth and yield, but may also reduce some diseases. Organic amendments such as high-quality compost and manures should be considered if available within a practical distance from the farm. Organic amendments are best applied in the fall or early spring to allow leaching of excess salts and destruction of pathogens. Care should be taken with any fertilizer program to avoid excessive nitrogen, which can increase plant susceptibility to soft rot and other diseases. Irrigation should be carefully controlled to minimize the time that plants are wet and surface water sources should be avoided. Raised beds should be used to help manage Pythium root rot and Phytophthora blight. Finally, *Phytophthora* and other soilborne pathogens can be moved from an infested field to a clean one on soil clinging to boots, equipment, etc. Power washing to remove soil is a good first step, followed by rinsing with a sanitizer. Allowing cull piles containing discarded peppers or cucurbits is not a good practice—plant material needs to be disposed of, preferably by burying, far from fields and surface waters.

6. Use Crop Protectants as Needed
Bactericides are usually ineffective in stopping established bacterial diseases under favorable environmental conditions. Copper bactericides are not recommended in the field for bacterial disease management due to the high incidence of copper resistance in the bacterial pathogens. If the other steps in the integrated disease management program have been followed, however, the need for bactericides is significantly reduced. Insecticides may be required to control European corn borer and other insects that damage pepper fruits, leading to bacterial soft rot. There are a number of fungicides labeled for use on peppers to manage Phytophthora blight. The newest product, Orondis, has very good efficacy against this disease. It is available as a pre-mix with either Revus (Orondis Ultra), Ridomil (Orondis Gold) or Bravo (Orondis Opti). To manage anthracnose, fungicides must be applied as soon as fruits begin to set, and continued on a weekly schedule as fruits develop. Several studies have shown the best results with Aprovia Top, Quadris, Quadris Top, Cabrio or Priaxor alternated with chlorothalonil or mancozeb. Some labels may recommend a spreader-sticker. Fungicides labeled for use against diseases of fruiting vegetables are listed in the [Midwest Vegetable Production Guide for Commercial Growers](#).
What is the Perishable Agricultural Commodities Act?

The Perishable Agricultural Commodities Act (PACA) establishes a code of fair trading practices covering the marketing of fresh and frozen fruits and vegetables in interstate and foreign commerce. The PACA protects growers, shippers, distributors, retailers, and others who deal in those commodities by prohibiting unfair and fraudulent practices.

Why do businesses that buy or sell fruits and vegetables need more protection than businesses in other industries?

The produce industry is unique. Dealers handle a perishable product and even a 1- or 2-day delay in marketing can mean the difference between profit and loss. By spelling out the responsibilities of all involved parties, the PACA helps promote the prompt marketing of produce, and protects the rights of buyers and sellers in the event of a contract dispute.

How is the PACA enforced?

The U.S. Department of Agriculture (USDA) PACA Division enforces the PACA through a licensing system. Nearly every trader involved in the marketing of commercial quantities of fresh and frozen fruits and vegetables in interstate or foreign commerce must have a valid PACA license. A produce trader who is found to have committed unfair trade practices may face a monetary penalty or other sanctions, license suspension, or in the most serious cases, license revocation.

How do I get a PACA license?

For information on obtaining a license, visit www.ams.usda.gov/paca or call the PACA Division at 800-495-7222.
Who needs a license? Who doesn’t?

In general, wholesalers, processors, truckers, grocery wholesalers, and foodservice firms that buy or sell more than 2,000 pounds of fresh or frozen fruits and vegetables in any given day are required to be licensed under the PACA.

Commission merchants, brokers, or growers’ agents who negotiate sales of fresh fruits and vegetables on behalf of others are required to be licensed on their first transaction.

Brokers who negotiate sales of only frozen fruits and vegetables on behalf of the vendor are subject to the PACA licensing requirements after the invoice value of total negotiated sales exceeds $230,000 in a calendar year.

Retailers must obtain a PACA license once the invoice cost of fresh and frozen fruit and vegetable purchases exceeds $230,000 in a calendar year.

Growers can apply for a PACA license but otherwise are exempt, so long as they sell only products they have grown.

Is there a penalty for operating without the required PACA license?

Yes. Companies that operate without a valid PACA license are subject to fines of up to $1,200 for each offense and $350 for each day the offense continues. Court injunctions can be issued against those who continue to operate without a license.

How is the PACA program financed?

The USDA PACA program is funded by license fees and complaint filing fees. No tax revenues are used to fund the PACA program.
What are my responsibilities as a PACA licensee?

The law requires that produce traders comply with the terms of their contracts. Sellers must ship the quantity and quality of produce specified in the contract. Buyers must accept shipments that meet contract specifications and pay promptly after acceptance. Prompt payment is defined as payment within 10 days unless the buyer and seller agree, prior to the sale, in writing, to different payment terms.

What can I do if I have a dispute with a supplier or a buyer over a business transaction?

The PACA Division offers dispute resolution services to members of the produce industry. A party can file a complaint, if a transaction is unpaid or there is a dispute between the parties over the contract. The other party must be a licensee or operating subject to license for a claim to be handled. The written complaint, accompanied by a $100 filing fee, must be filed within 9 months from the date payment was due or the damages were suffered.

The PACA Division's complaint services include informal mediation to help the parties resolve their differences. Mediation allows both parties to air their differences in a neutral environment and identify a resolution.

If parties cannot reach an informal resolution, the complainant may file a formal complaint. USDA handles formal complaints much like lawsuits are handled in a court of law. However, instead of a judge, the Secretary of Agriculture determines the outcome of the complaint, and can issue an award, plus interest, based on the evidence in the case. There is a $500 filing fee for a formal complaint.
The complainant can recover the filing fee if an order is issued in its favor.

If a licensee fails to satisfy a PACA award, USDA will suspend the firm’s license and restrict the firm and its principals from operating in the produce industry for up to 3 years.

**What types of unfair trade practices can result in claims being filed?**

- Failure to pay promptly the agreed price of produce that complies with contract terms;

- Failure or refusal to account truly and correctly, or to make full payment promptly, for produce shipped on consignment or on joint account;

- Rejecting, without reasonable cause, produce bought or contracted to be handled on consignment;

- Failure to deliver the contracted produce in a timely manner, and at the price and quality level specified in the purchase agreement; and

- Discarding, dumping, or destroying without reasonable cause any produce received to be sold on behalf of another firm.

**Where can I get information about a firm’s PACA license status or complaint history?**

Visit [www.ams.usda.gov/paca](http://www.ams.usda.gov/paca) to verify whether a firm has a valid license. Call the PACA Division at 800-495-7222, for general information about a firm’s PACA complaint history.
Can I recover money from a firm that has gone out of business or filed for bankruptcy protection?

Yes. Under the PACA trust provisions, a buyer must hold its produce-related assets for the benefit of unpaid produce suppliers who have preserved their trust rights. In the case of a business failure, the debtor's trust assets are not available for general distribution to other creditors until all valid trust claims have been satisfied. Because of this, suppliers that file for trust protection have a far greater chance of recovering money owed them when a buyer goes out of business.

What must sellers do to preserve their trust rights?

Although the trust automatically goes into effect when the buyer receives the goods, sellers must properly preserve their trust rights by meeting specific notification requirements. Produce sellers can preserve their eligibility for trust benefits by providing a trust notice that contains detailed information sufficient to identify the transaction to their selling agent or customer.

What are the notification requirements?

The law allows PACA licensees to qualify automatically for trust protection by including on their invoices or other billing documents the following statement:

“"The perishable agricultural commodities listed on this invoice are sold subject to the statutory trust authorized by section 5(c) of the Perishable Agricultural Commodities Act, 1930 (7 U.S.C. 499e(c)). The seller of these commodities retains a trust claim over these commodities, all inventories of food or other products derived from these commodities, and any receivables or proceeds from"
the sale of these commodities until full payment is received”.

Unlicensed produce sellers must provide the buyer, i.e., the produce debtor, with written notice of their intent to preserve trust benefits under the PACA within 30 days of the date that payment was past due or notification was received that a payment instrument was dishonored.

**I am a grower selling only produce that I grow. While I am not required to have a license, can I obtain a PACA license and use the alternative method of including the trust statement on my invoices to qualify for trust protection?**

Yes, a grower with a PACA license is eligible to use the alternative method of including the trust statement on its invoices or other billing documents to qualify for trust protection.

**How long are a seller's rights preserved?**

Trust claimants who preserve their trust rights by providing proper notice remain beneficiaries until paid.

**How is payment from trust assets enforced?**

The trust is a self-help tool that is separate and unrelated to filing a complaint under the PACA. Trust beneficiaries may file an action in U.S. District Court to enforce payment from the trust immediately following a buyer’s failure to pay promptly. If the debtor is bankrupt, trust beneficiaries should file their claims for payment with the bankruptcy court.
If I file a trust claim with the court, can I still file a PACA complaint?

Yes, a party can file a complaint under the PACA while pursuing a trust action with the court. However, PACA may, in some cases, stay the PACA complaint pending resolution of the trust action.

Can I agree to payment terms other than those in the PACA regulations and still qualify for protection under the trust?

Although PACA prompt payment terms specify payment within 10 days of the date of acceptance, a buyer and seller may agree to extended terms as long as the agreement is made in writing prior to the transaction, and the terms are reflected on the invoice and all other billing documents. However, to qualify for trust protection, the agreed-upon payment term cannot exceed 30 days from the date of acceptance.

What is a disciplinary action under the PACA?

USDA may penalize a licensee or an entity operating subject to license that repeatedly and flagrantly violates the PACA. Disciplinary action may include sanctions and/or the suspension or revocation of an individual’s or firm’s PACA license. In lieu of suspension or revocation, the Secretary of Agriculture may assess a civil penalty of up to $2,000 for each violation or for each day the violation continues.
How does the USDA decide if a PACA license should be suspended or revoked as the result of a disciplinary proceeding?

USDA considers the seriousness and nature of the violation(s), the number of violations that took place, the length of time during which the violations occurred, and the effect that the violations had on the produce industry. Revocation of a PACA license is the most severe penalty that can be imposed.

How does a PACA license suspension or license revocation restrict a firm and/or its principals?

Upon the suspension or revocation of a PACA license, both the firm and its responsibly connected individuals are automatically subject to licensing and employment restrictions that prohibit them from working or operating in the produce industry for a certain period of time. Individuals are considered to be responsibly connected if they are an owner, a partner in a partnership, a member or manager in a limited liability company, or an officer, director, or holder of more than 10 percent of the stock of a corporation or association.

When a PACA license is suspended, or a licensee or individual fails to pay a reparation award resulting in sanctions, the firm or individual cannot conduct business in the produce industry. Furthermore, none of the persons responsibly connected with the firm can engage in business under the PACA, nor can another PACA licensee employ them, unless a PACA-approved surety bond is posted.
After one year, responsibly connected individuals that were barred from employment as a result of a license revocation or sanctions based on findings of repeated and flagrant violations may be employed by a PACA licensee that posts a PACA-approved surety bond.

What are some common PACA violations that prompt the USDA to take disciplinary action?

- Failure to pay for produce purchased;
- Slow payment;
- Failure of a commission merchant or grower’s agent to render accurate accountings and pay promptly the net proceeds due the shippers and growers;
- Flagrant misbranding or misrepresentation of produce shipped in interstate or foreign commerce;
- Making false and misleading statements for a fraudulent purpose; and
- Employing a restricted person after receiving notice from the USDA that the employment is prohibited.

Does the produce industry support the PACA?

The industry developed and sponsored this law, and the PACA is broadly supported throughout the produce industry. The law has been amended several times over the years to keep pace with changing trade practices.
Where can I get more information about the PACA program?

Visit the PACA Division’s website at:

www.ams.usda.gov/paca

The website contains information on licensing, current PACA licensees, resolving commercial disputes, mediation, reporting PACA violations, the PACA trust, PACA publications and announcements, and PACA’s regional offices and staff contacts.

The USDA PACA Division also offers a free online training program that covers the basic information needed to comply with the PACA. To access the online training, click on the Education and Training link on the website.

For questions or additional information, call the PACA Division at 800-495-7222.
Perishable Agricultural Commodities Act

Harrison Pittman
Center Director

The Perishable Agricultural Commodities Act, or “PACA,” was enacted in 1930 to regulate the marketing of perishable agricultural commodities in interstate and foreign commerce. The primary purposes of the PACA are to prevent unfair and fraudulent conduct in the marketing and selling of perishable agricultural commodities and to facilitate the orderly flow of perishable agricultural commodities in interstate and foreign commerce. It also provides important protections to sellers of “perishable agricultural commodities” that are relevant to many specialty crop producers.

PACA is administered and regulated by the Agricultural Marketing Service (AMS), an agency within the United States Department of Agriculture. AMS provides further information on PACA on its website, http://www.ams.usda.gov, as well as the National Agricultural Law Center at http://www.nationalaglawcenter.org/readingrooms/perishablecommodities/.

PACA is important for many specialty crop producers because it governs important aspects of transactions between sellers and buyers of fresh and frozen fruits and vegetables. In particular, the unfair conduct and the statutory trust provisions are particularly significant.

Key Definitions

PACA applies to “dealers”, “commission merchants”, and “brokers.” In general, a "dealer" is "any person engaged in the business of buying or selling in wholesale or jobbing quantities . . . any perishable agricultural commodity" that has an invoice value in any calendar year in excess of $230,000.00. There are some exceptions to this definition that could become applicable under certain situations, but the general definition provided here is very instructive. A “commission merchant” is “any person engaged in the business of receiving . . . . any perishable agricultural commodity for sale, on commission, or for or on behalf of another.” Finally, a “broker” is a person engaged in the business of negotiating sales and purchases of perishable agricultural commodities either for or on behalf of the seller or buyer. A person who is “an independent agent negotiating sales for or on behalf of the vendor” is not considered to be a broker, however, if “sales of such commodities negotiated by such person are sales of frozen fruits and vegetables having an invoice value not in excess of $230,000.00 in any calendar year.”
Unfair Conduct

As noted, PACA prohibits certain types of conduct on the part of buyers and sellers, though issues arising in this arena commonly focus on the alleged conduct of commission merchants, dealers, and brokers. For example, it is unlawful for a commission merchant, dealer, or broker “to engage in or use any unfair, unreasonable, discriminatory, or deceptive practice in connection with the weighing, counting, or in any way determining the quantity of any perishable agricultural commodity received, bought, sold, shipped, or handled . . . .” It is also unlawful for a commission merchant, dealer, or broker to do any of the following:

- "to make, for a fraudulent purpose, any false or misleading statement in connection with any transaction involving any perishable agricultural commodity";
- "to fail, without reasonable cause, to perform any specification or duty, express or implied, arising out of any undertaking in connection with any such transaction"; and
- "to fail or refuse truly and correctly to account and make full payment promptly" with respect to any transaction.

PACA provides that a commission merchant, dealer, or broker that violates any of the unfair conduct provisions “shall be liable to the person or persons injured thereby for the full amount of damages . . . sustained in consequence of such violation.” The injured person or persons may enforce such liability by bringing an action in federal district court or by filing a reparations proceeding against the commission merchant, dealer, or broker.

Licensing

The PACA requires that all commission merchants, dealers, and brokers obtain a valid and effective license from the USDA Secretary. PACA does not require growers who sell perishable agricultural commodities that they have grown to obtain a license, though sellers commonly choose to apply for a PACA license. From the grower’s perspective, the license demonstrates that the buyer is a legitimate business person or business entity who can be trusted to honor contractual terms and PACA requirements.

The requirement of a PACA license by a commission merchant, dealer, or broker is akin to the requirement of a driver obtaining a driver’s license. A commission merchant, dealer, or broker that fails to obtain a valid and effective license shall be subject to monetary penalties, though some leniency may be provided if the failure to obtain the license was not willful. Importantly, if a commission merchant, dealer, or broker has violated any of the unfair conduct provisions, that person’s PACA license may be suspended or possibly revoked, which effectively negates their ability to engage in the fruit and vegetable industry. A person who knowingly operates without a PACA license may be fined up to $1,200 for each violation and up to $350 for each day the violation continues.

Statutory Trust

For specialty crop producers, the statutory trust is a very important aspect of PACA since it is specifically designed to protect sellers of perishable agricultural commodities in the event a
buyer becomes insolvent or otherwise refuses to pay for produce. The statutory trust provision under PACA specifically provides the following (emphasis added):

[perishable agricultural commodities received by a commission merchant, dealer, or broker in all transactions, and all inventories of food or other products derived from perishable agricultural commodities, and any receivables or proceeds from the sale of such commodities or products, shall be held by such commission merchant, dealer, or broker in trust for the benefit of all unpaid suppliers or sellers of such commodities or agents involved in the transaction, until full payment of the sums owing in connection with such transactions has been received by such unpaid suppliers, sellers, or agents.

In other words, the buyer is required to maintain a statutory trust relative to fruits and vegetables received but not yet paid for. If a buyer becomes insolvent or declares bankruptcy, the statutory trust provides priority status to the unpaid seller against all other creditors in the world.

Consequently, the PACA statutory trust is often referred to as a “floating trust.” Thus, a PACA trust beneficiary is not obligated to trace the assets to which the beneficiary’s trust applies. When a controversy arises as to which assets are part of the PACA trust, the buyer has the burden of establishing which assets, if any, are not subject to the PACA trust. The PACA beneficiary only has the burden of proving the amount of its claim and that a floating pool of assets exists into which the produce-related assets have been commingled.

If a buyer files for bankruptcy, the trust assets do not become "property of the estate" because the buyer-debtor does not have an equitable interest in the trust assets. Rather, the buyer holds those assets for the benefit of the seller. Thus, a beneficiary of the PACA trust has priority over all other creditors with respect to the assets of the PACA trust.

However, the seller must take certain steps in order to protect his or her rights in the statutory trust. One method of preserving rights to the statutory trust is by simply including the following exact language on the face of the invoice:

The perishable agricultural commodities listed on this invoice are sold subject to the statutory trust authorized by section 5(c) of the Perishable Agricultural Commodities Act, 1930 (7 U.S.C. § 499e(c)). The seller of these commodities retains a trust claim over these commodities, all inventories of food or other products derived from these commodities, and any receivables or proceeds from the sale of these commodities until full payment is received.

It should be noted that this method is available only to those sellers who are licensed under PACA. Hence, many sellers will elect to be licensed so that they can preserve their statutory trust rights in this manner. Unlicensed sellers (or licensed sellers who do not want to include the foregoing language on their invoices) may preserve their statutory trust rights through a different method. This method requires that the seller provide written notice that specifies it is a “notice of intent to preserve trust benefits”. In addition, the written notice must include the name(s) and address(es) of the seller, commission merchant, or agent, and the debtor as well as the date of the transaction. The written notice must also identify the commodity at issue, the invoice price, payment terms, and the amount owed.
This written notice must be given within thirty calendar days

- after expiration of the time prescribed by which payment must be made, as set forth in the regulations issued by the Secretary;
- after expiration of such other time by which payment must be made, as the parties have expressly agreed to in writing before entering into the transaction; or
- after the time the supplier, seller, or agent has received notice that the payment instrument promptly presented for payment has been dishonored.

If the payment terms extend beyond thirty days, the seller will lose his or her rights to the statutory trust. PACA also provides that if the parties to the transaction “expressly agree to a payment time period different from that established by the Secretary, a copy of any such agreement shall be filed in the records of each party to the transaction and the terms of payment must be disclosed” on the documents relating to the transaction. But, as noted, if this agreement extends the time for payment for more than thirty days, however, the seller cannot qualify for coverage under the trust.

**Prompt Payment**

PACA also requires produce buyers to make full payment promptly, and the regulations implementing PACA expound on PACA. While there are additional rules embedded in the regulations, the most common payment requirement is that payment be made 10 days from date of acceptance of the goods for purchase.

For more information, please refer to the National Agricultural Law Center’s Reading Room on PACA, available at: [http://www.nationalaglawcenter.org/readingrooms/perishablecommodities/](http://www.nationalaglawcenter.org/readingrooms/perishablecommodities/), or contact the National Agricultural Law Center.
As a farmer selling fruit and vegetable crops, your right to be paid is typically governed by your agreements with the buyers of your produce. However, you have certain rights beyond those agreements under a federal law called the Perishable Agricultural Commodities Act, or “the PACA.”

**What is the Perishable Agricultural Commodities Act?**

The PACA is a federal law designed to ensure fair business dealings in the produce industry. Generally, the PACA requires sellers to actually deliver the quantity and quality of produce they agreed to provide buyers. In turn, the PACA requires buyers to accept and pay for produce shipments where sellers have lived up to their end of a bargain.

**How is the PACA enforced?**

The United States Department of Agriculture (USDA) enforces the PACA through a licensing system and through regulations that allow USDA to force buyers to pay farmers for their produce. The agency authorized to enforce the PACA and investigate complaints of violations is USDA’s Agricultural Marketing Service (AMS), which has a special PACA Branch. **The USDA’s PACA Branch has a toll-free number (800-495-7222) that you can call to report possible violations of the PACA or ask general PACA questions.**

- In general, anyone who buys or sells commercial quantities of fruits and vegetables must maintain a PACA license. Farmers who sell only their own produce are not required to have a PACA license.
- If produce buyers or sellers violate the PACA requirements, USDA may suspend or revoke their license, prohibiting them from working in the produce industry.
PACA violators may also be forced to pay monetary damages to farmers who were not paid according to the PACA requirements.

What does the PACA say about my right to be paid?

- The PACA requires that farmers be promptly and fully paid for their produce. Generally, **prompt payment means within 10 days from the date the buyer accepts produce.**
- Under the PACA, a buyer “accepts” produce by unloading it or by re-routing it to a different location than the agreed-upon delivery destination. A buyer’s failure to reject produce within a “reasonable time” is also considered acceptance of the produce. For fresh produce, buyers must typically notify farmers that they are rejecting delivered produce within 8 hours of delivery if the produce was shipped by truck, and within 24 hours of delivery if the produce was shipped by other means.

Under what circumstances may buyers reject produce and refuse to pay me?

- Generally, buyers may reject produce and refuse to pay for it if the delivered produce is not of the type, quantity, or quality the farmer agreed to provide, and the buyer follows proper rejection procedure within the time allowed.

What can I do if the buyer rejects my produce?

- If the buyer has properly rejected produce, the farmer might be required to take responsibility for the rejected produce and make arrangements to remove it from the buyer’s premises. However, if the buyer has improperly rejected the produce, the farmer might lose the right to claim money damages if the produce is taken back. Farmers who have questions about how to respond to a rejection of produce should call the USDA’s toll-free PACA number for more information: 800-495-7222.
- In some cases it may be possible to try to resell improperly rejected produce to another buyer and then recover from the original buyer any difference between the sale price with the original buyer and the substitute sale price. As described in detail below, the PACA provides an administrative process you may use to recover any money damages from buyers who wrongfully reject your produce.

Under what circumstances may sales agents destroy produce they agreed to sell on my behalf and refuse to pay me?

Many farmers hire agents to sell their produce for them. These agents typically receive a commission for their services. The PACA’s requirements concerning prompt
payment and the rejection of produce apply to sales agents. The PACA also imposes additional requirements on sales agents concerning their right to destroy produce that they claim cannot be sold because of its alleged poor quality.

- Under the PACA, agents who agree to sell produce on a farmer’s behalf are generally prohibited from destroying that produce unless they can prove it has no commercial value or that a local health officer or other authorized official ordered them to destroy it.
- If an agent wrongfully destroys your produce, you may use the PACA’s administrative process to recover money damages from that agent to compensate you for the reasonable value of your produce. The USDA Market News prices generally determine what is “reasonable.” The USDA’s Market News prices can be accessed through the USDA’s Web site on the Internet at http://marketnews.usda.gov/.

What does PACA say about my right to be paid when a buyer goes out of business or files for bankruptcy?

- If a buyer goes out of business or declares bankruptcy, you may still recover the money owed to you if you preserved your rights under the PACA statutory trust.
- The PACA statutory trust requires the buyer to hold assets in trust until the produce seller is paid in full. The trust is a strong remedy for farmers because it allows them to collect their payments before other creditors. Because of this, farmers who file for trust protection have a much greater chance of recovering money owed them when a buyer goes out of business.
- To preserve your PACA trust rights, you must send the buyer a notice of your intent to preserve trust benefits within 30 days from the payment due date for each sales transaction. To ensure they preserve their rights under the PACA, many farmers make it a practice to send a notice of intent to preserve trust benefits to the buyer before payment is even due.

To preserve PACA trust rights, the notice must:

- State that it is a notice of intent to preserve trust benefits.
- Include your name and address as well as the buyer’s name and address.
- State the payment date.
- Set forth the amount of money not paid or in dispute.
What can I do if I think a PACA violation has occurred?

Farmers who believe their payment rights under the PACA were violated may file a complaint with USDA’s PACA Branch.

- If you want to seek **money damages** for a PACA violation, your complaint must be accompanied by a $60.00 filing fee and must be filed within 9 months from the date payment was due.

  A complaint for money damages must be in writing and should include:
  - Your name and address and the name and address of the person or business you are seeking payment from.
  - A description of the problem.
  - The date the problem occurred.
  - The amount of money not paid or in dispute.

Complaints for money damages should be mailed to USDA’s PACA Branch office covering the state where the buyer’s business is located. The contact information for the PACA Branch office covering Florida is as follows:

  U.S. Department of Agriculture  
  Agricultural Marketing Service  
  Fruit & Vegetable Programs, PACA Branch  
  819 Taylor Street, Suite 8B02  
  Fort Worth, Texas 76102-9727  
  Business Hours: 8 a.m. - 4:30 p.m. Central Time  
  Telephone: 800-495-7222 (toll free)  
   817-978-0777 (local)  
  Fax: 817-978-0786

A list of the other PACA Branch offices and the geographic areas they cover can be found on the Internet at http://www.ams.usda.gov/fvpaca/office.htm. If you have questions about filing your complaint, call USDA’s toll-free PACA number for more information: 800-495-7222.

- It is also possible to file a **disciplinary complaint** against a buyer, seeking suspension or revocation of the buyer’s PACA license. There is no charge to file disciplinary complaints, and they may generally be filed within 2 years of a PACA violation. Disciplinary complaints may be filed anonymously and can be initiated by calling the USDA’s PACA Branch.