# manzana® nules 2022







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#### With a vocation for excellence.

Offering customers quality harvesting clippers has always been a priority objective for MANZANA NULES. That is why they have always directed all their efforts to satisfy the needs of the most demanding professionals, manufacturing shears that combine durability, cutting quality and protection for the harvested fruit.

To achieve this, MANZANA NULES has combined the traditional processes that have given its harvesting shears the quality and prestige they enjoy today, with new production techniques and state-of-the-art machinery that provide superior working precision.

At the same time, processes have been implemented to evaluate the quality of the shears manufactured.

We have been able to combine artisanal processes with new production techniques and state-of-the-art machinery.

### Quality at source.

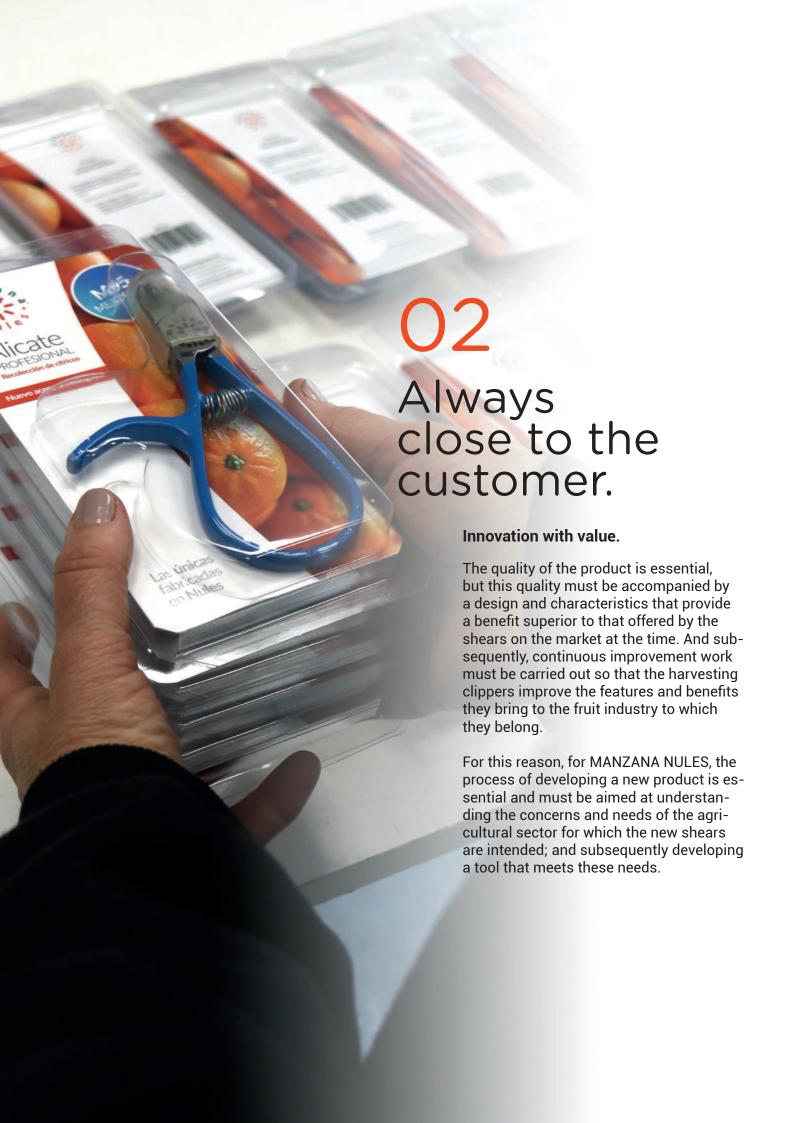
This philosophy, aimed at seeking excellence in the products manufactured, was implemented from the beginning when Ramón Manzana realized in 1963 that the citrus harvesting shears he was using were not suitable and decided to manufacture his own shears.

From that moment on, a culture was established where product quality was the central focus of the entire business strategy, and this is still the case today.

For this reason, every time we develop a new product, great emphasis is placed on aspects such as the choice of the most suitable materials, the most suitable design or the benefits it will bring to workers and fruit-producing companies



One of the first models created by Ramon Manzana.



To achieve this objective, it is important to be close to the customer and to know how to listen to him. He is the one who knows the day-to-day needs of the agricultural sector in which he works and he is also the one who can give guidance to achieve an improvement solution.

For this reason, at MANZANA NULES, we are constantly in contact with the customer, listening patiently and seeing how we can improve our products or develop new ones that improve the quality of the harvested fruit and the performance of the workers.

This philosophy of living innovation from within agriculture has made it possible in recent years to broaden the company's field of action and to direct efforts towards developing new types of harvesting clippers specialized in other fruits such as apples, persimmon, garlic and avocado.

#### Our people.

MANZANA NULES is not just a company, but behind it there is a team of people who make what this company is today a reality. From the design of new products, through production, logistics, administration and marketing, until they reach the end customer. Each of the people who form part of the company constantly strives to ensure that our products meet the expectations of our customers and that the harvest is increasingly efficient, thus reducing post-harvest problems.

Another fundamental pillar of the company is its distribution network, made up of companies with great experience in the field of agriculture, who know perfectly well the value that MANZANA NULES products can offer to agricultural workers and companies. Moreover, these companies share the same values as MANZANA NULES, in terms of putting the customer at the center of the business, offering a high value product and impeccable service.

MANZANA NULES products are increasingly appreciated in more and more countries, and in order to provide professionals and producers with the best service and advice, they have a large network of international distributors in the main markets.





# Healthy fruit starts at harvest.

Healthy fruit depends on a production process that starts in the field with pre-harvest tasks and ends when the fruit reaches the end customer. Harvesting is a fundamental part of this process and can make all the difference.

Our FRUIT CARE range is designed to reduce the percentage of skin wounds produced at the moment of cutting. This reduces post-harvest problems.

### Designed to care for your fruit.

Rotten fruit is one of the main causes of economic loss, negatively affecting the results of citrus companies and in many cases also their prestige.

Harvesting fruit by hand or the use of some types of shears will increase the percentage of damaged fruit. Many of these shears are not designed to cut close to the skin, so they may cause a high number of wounds through which fungal spores can enter.

The Valencian Institute of Agricultural Research (IVIA) has certified that with the use of our clippers, wounds can be reduced by up to 64%. Thus achieving a significant reduction in post-harvest problems and increasing the quality of the citrus fruit.

To achieve these results, our FRUIT CARE range of shears is specially designed to adapt to the morphology of the fruit, making a perfect cut without damaging the skin of the citrus fruit. Among the main features designed to reduce the percentage of wounds are rounded tips, curved ends, concave blades and relieve on the counter-blade.









### M95<sub>DI/ZU</sub>





This model was developed in 1995 and was the first of the FRUIT CARE range. It was an evolution of the M87 model, in which improvements were made to reduce the damage caused during harvesting. The clippers are made entirely of high-alloy steel, which gives them a high cutting quality and resistance to wear and tear.

This model has a tongue and groove assembly that

### provides a perfect cut despite the play that can appear over time due to intensive use. It also has an extra-fine cutting blade that will avoid leaving long stalks.

gr	↔	图
105	135	25



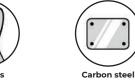
steel

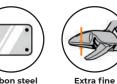




tips







**M96**<sub>AM</sub>

resistance.

harvesting.

∫gr∖

80

This model is an adaptation of the M95 model for other

markets. It has shorter and more curved handles, which

position. These citrus harvesting clippers are also made

allow the hand to adapt better and obtain a more ergonomic

entirely of high-alloy steel for high cutting quality and wear

This model has a tongue and groove assembly that offers a

perfect cut despite the slack that can appear over time, due

to intensive use. It also has an extra-fine cutting blade that

will avoid leaving long stalks. Model belonging to the FRUIT

 $|\leftrightarrow|$ 

118

CARE range and designed to reduce damage during citrus

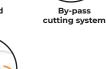




的

25











cutting blade







cutting blade





### 

## M15DI/ZU





In this model of shears for citrus fruit harvesting, a new assembly system has been incorporated, replacing a tongue and groove system through welding with another through rivets. This allows for greater precision in the adjustment of the shears and a reduction of the clearances.

Manufactured from high quality carbon steel for smooth cutting and durability. This model has a tongue-and-groove joint that provides a perfect cut despite the play that can occur over time due to heavy use.

Like the other models in the FRUIT CARE range, it is designed to reduce the percentage of damages on the skin of the citrus during harvesting, thanks to a raised section on the counter-blade and curved and rounded tips. The curvature of the handles allows the shears to enter the fruit at a more suitable angle for cutting, improving ergonomics and worker comfort









cutting system

cutting blade

rved Counter-blade

tips

Ergonomic







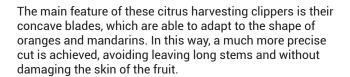












This is another of our FRUIT CARE models. In addition, the reduced length of its blades provides a cut with less effort. Made of high quality carbon steel for smooth cutting and durability. Thanks to its central bolt and nut, this model can be adjusted as often as necessary, thus eliminating the play caused by intensive use. Along with the clippers, a leather strap is also supplied to hold the clippers in the hand.

gr	↔	图
80	110	50











Adjustable

blades





### M14LAM (B)







This model has the same features and advantages as the M14-AM model but with longer handles.

In addition, these handles are covered with a non-slip rubber, which provides a more comfortable grip.

<b>∑</b> gr \	↔	图
130	145	50









Carbon steel

Extra fine

cutting blade

Adjustable

Concave cutting blades







Counter-blade

**Ergonomic** 

Handle with greater lever



relief



Ergonomic

cutting blade









### M11<sub>DI/ZU</sub>







## **M18**DI/ZU (%)

comfortable position for the worker.



With curved tips and raised section on the counter-blade

Made of high quality carbon steel for smooth cutting and durability. Thanks to its central bolt and nut, this model can

to reduce damage to the skin of the fruit during harvesting.

be adjusted as often as necessary, thus eliminating the play

caused by intensive use. Ergonomic handles provide a more

 $|\leftrightarrow|$ 

140

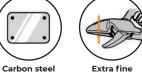




This model also has a cutting stop that positions the stalk at the right cutting point, further preventing damage to the fruit. Manufactured from high quality carbon steel for smooth cutting and durability. Thanks to its central bolt and nut, this model can be adjusted as often as necessary, thus eliminating the play caused by intensive use. Ergonomic handles provide a more comfortable position for the worker.

_gr \	↔	的
105	140	25







cutting blade









Curved





tips



Opening stop





gr



cutting blade

Counter-blade

relief





Rounded tips

By-pass cutting system

的

25

Ergonomic

Opening

stop









Curved

tips









### **M20**DI/ZU (§)



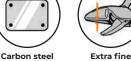


Designed for the harvesting of citrus fruits with leaves. The harvesting of citrus fruit with leaves is increasingly in demand by the end markets. Following the philosophy of adding value to the fruit industry, a problem shared by all producers and marketers of this type of fruit was detected.

The problem lies in the fact that when the branch is cut with conventional shears, the hard end of this branch causes a high percentage of punctures to other fruit during the post-harvest process. This model is designed to cut and at the same time soften the end of the branch, thus achieving a very high reduction in the percentage of wounds between

∫ gr \	↔	B
170	165	17







cutting blade















### MO1<sub>AM</sub>

Shears for fruit harvesting. Basic model with a stainless steel blade and aluminium handle.

gr	$ \leftrightarrow $	图
75	140	25



blades





Aluminium

Fast close

## What makes us different?

When harvesting apples by hand, a stalk is often left protruding from the fruit. In some apple varieties, this stalk can cause punctures in other fruits during the whole post-harvest process.

On the other hand, the use of shears that have not been specially designed for apples may cause wounds in the skin of the fruit due to the fact that the blades do not adapt to the shape of this fruit.

All these injuries cause great losses for apple producers and traders, as much of the fruit will be unsuitable for sale.



The concave shape of the blades adapts to the shape of the apple.

Our models for harvesting apples are adapted to their shape, managing to cut the stalk deep enough so that it does not damage other fruit, without damaging the skin at the time of cutting.

The curvature of the handles allows the shears to enter the cut at the right angle, making it easier for the worker.



Makes a perfect cut without damage.









### **M14**<sub>AM</sub>







This is another of our FRUIT CARE models. In addition, the reduced length of its blades provides a cut with less effort. Made of high quality carbon steel for smooth cutting and durability. Thanks to its central bolt and nut, this model can be adjusted as often as necessary, thus eliminating the play caused by intensive use. Along with the clippers, a leather strap is also supplied to hold the clippers in the hand.

The main feature of these citrus harvesting clippers is their concave blades, which are able to adapt to the shape of oranges and mandarins. In this way, a much more precise cut is achieved, avoiding leaving long stems and without damaging the skin of the fruit.

gr_\	<del>&lt;</del> -	<b>&gt;</b>	田
80	11	0	50









blades

### M14LAM (B)







This model has the same features and advantages as the M14-AM model but with longer handles.

In addition, these handles are covered with a non-slip rubber, which provides a more comfortable grip.

gr	↔	田
130	145	50









Carbon steel

Extra fine cutting blade

Adjustable

Concave cutting blades









Extra fine cutting blade

Adjustable

Concave cutting

Counter-blade Ergonomic relief

## What makes us different?

Garlic cutting is a physically demanding task for the worker due to the hardness of the stalk and the root, and also due to the high number of cuts made each working day.

At the same time, the cutting edge deteriorates very quickly due to the soil that sticks to the garlic when cutting, causing the shears to stop cutting well in a short time.

For this reason, we manufacture our shears in a high-alloy steel with a specific heat tratment that offers a longer service life of the shears and at the same time the possibility of being able to sharpen them more easily.

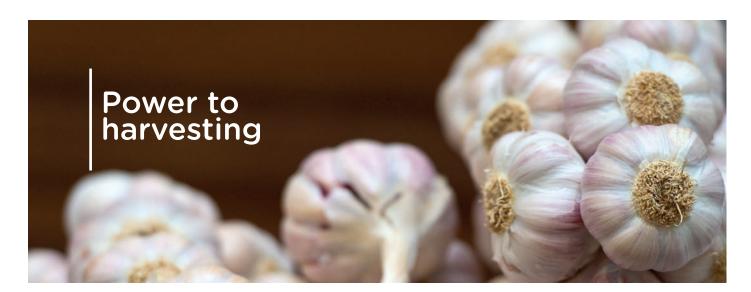
The handles are covered with a non-slip rubber that increases the grip of the shears and improves the quality of the work

- Less effort when cutting
- ✓ Maximum openness
- ✓ Made of high-strength alloy steel
- ✓ Non-slip handles



Designed to cut with less effort..









### **M21**c

Shears specifically designed for cutting garlic. Made of high-alloy steel for better resistance to wear and tear and at the same time easy to sharpen.

Sliding cut of its blades thanks to the off-center rivet, thus achieving a lower cutting effort.

Handles coated with non-slip material for greater comfort

gr	↔	B
170	220	25



### **M23**c

Shears specifically designed for cutting garlic. Made of high-alloy steel for better resistance to wear and tear and at the same time easy to sharpen.

Blades designed to achieve a larger opening in the cutting area, facilitating the operator's work. Special sharpening of the cutting blades to eliminate resistance and cut with less effort.

Handles coated with non-slip material for greater comfort

_ gr \	↔	B
170	220	25



## What makes us different?

The M22AM model has been designed following the philosophy of our company, which is to create a product that adapts to the technical particularities faced by the avocado industry, creating a product that solves the existing problems and improves the quality of the harvested fruit.

In order to do this, we have been introduced to the sector by avocado producing companies in various countries, finding out what are the deficiencies and problems to which the fruit is exposed during the harvesting process.

With this information and our extensive experience in the manufacture of this type of clippers, we have designed a unique model that will bring the sector a substantial improvement in the harvest and the final quality of the fruit.



The stem of the avocado is a point of entry of fungi that cause multiple pathologies. Therefore, it is necessary that the stem is not cut too close to the fruit, since there may be an entrance of pathogens that will damage the fruit. On the other hand, it is also important not to leave the stalk too long, as it may damage other fruits, and at the same time it may fall off during the post-harvest process.

The M22AM model, thanks to an enhancement on the counter-blade, will leave a stalk of approximately 3 mm in length, making it easier for the worker and thus avoiding leaving stalks that are too short. In the same way, having a reference point to cut will also avoid leaving stalks that are too long, achieving stalks with a more homogeneous length.



Designed no to damage the fruit.

#### Designed not to damage the fruit.

Another entrance door for fungi are all the wounds that the fruit may have, so it is of vital importance that during the whole harvesting process great care is taken not to produce wounds on the skin of the fruit.

In this case the clippers are of great importance because, if not properly designed, they can be responsible for a large number of injuries.

The M22AM model has the tips of the two blades completely blunt, thus avoiding punctures. At the same time, all the edges that come into contact with the fruit are rounded. The result is a clipper that does not damage the fruit





gr	↔	田
130	145	50

### M22<sub>AM</sub> (3)







Professional clippers for harvesting avocados, mango and other delicate fruits, belonging to the FRUIT CARE range.

Made of high quality carbon steel, giving it great durability and cutting quality. Its specific design prevents injury to the skin of the fruit while the raised section on the counter-blade will ensure a homogeneous stalk of approximately 3 mm in length. These characteristics will result in fruit of a higher quality standard.

In addition, the curved handles and their non-slip coating will provide greater ergonomics and working comfort. Together with the shears, a leather strap is also supplied to hold the shears in the hand.









Adjustable

Raised section on the counter-blade









## What makes us different?

Harvesting persimmon by hand or with a generic shears leaves a high percentage of fruit with long stems that will puncture other fruit throughout the post-harvest process. These injuries constitute a high percentage of losses for the persimmon growers, in most cases between 8 and 11% of the production.

The M17-DI model is specifically designed for persimmon harvesting.

Its main advantage is that it is designed to make a flush cut parallel to the stalk, thus avoiding the long stalks that cause so many losses to the sector. For this purpose, the M17-DI model has blades with a length and thickness suitable for easy access to the sunken stalk of the persimmon.

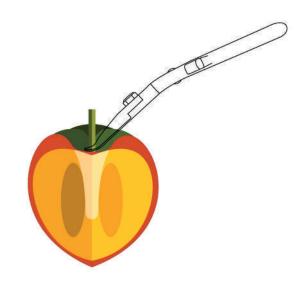
It is also equipped with a curvature at the end of the blade that allows a parallel cut flush with the fruit, thus preventing the stalk from pinching other fruit.

It also has a cutting stop that will position the blade at the ideal cutting point to prevent it from damaging the fruit.

Designed to avoid punctures caused by the long stems of other persimmons



Puncture caused by another persimmon with a long stem during handling.













The M17-DI model is specifically designed for persimmon harvesting.

Its main advantage is that it is designed to make a flush cut parallel to the stalk, thus avoiding the long stalks that cause so many losses to the sector.









Carbon ste

Extra fine cutting blade

Rounde tips

By-pass cutting system









gr \	↔	图
130	145	50





### **UV**17

Designed to clean grape bunches.

These shears are made of forged steel, providing excellent quality and durability. Extra thin blades for better access to the grapes.

The extra-large thimbles provide extra comfort. The body and blades are blued to prevent corrosion.









 140

 20











## Tree saw Troyano

New series of TROYANO CR conical saws with the latest technology for pruning, where you can see your highest demands fulfilled; perfect, fast and fatigue-free cutting finish.

Long-lasting sharpening, easy to use, with light and durable aluminum /rubber handles and practical one-screw replacement blades. These are the main characteristics that distinguish TROYANO saws from others.



Blades with conical sharpening which reduces the friction of their surface and achieves a high work speed without effort.



Individually hardened and tempered teeth with induction hardening technology for maximum strength, 67-68° HRC..



Japanese triple-sided sharpening with the latest technology for a fast and clean cut.



Rust-resistant, chrome-plated high-carbon steel blades. Washable.



SK-5 steel with high carbon content to increase the durability of the cutting edge.



Practical spare blade with a single screw for quick exchange.

MODELO	↔	mm_	∫ gr \	B	的
CR-24 AL*	240 mm	4 mm	160gr	10	40
CR-24 ALF**	240 mm	4 mm	260gr	10	40
CR-27 AL*	270 mm	4 mm	170gr	10	40
CR-27 ALF**	270 mm	4 mm	270gr	10	40
CR-30 AL*	300 mm	4 mm	180gr	10	40
CR-30 ALF**	300 mm	4 mm	280gr	10	40
CR-33 AL*	330 mm	4 mm	190gr	10	40
CR-33 ALF**	330 mm	4 mm	290gr	10	40
R/CR-24***	240 mm	4 mm	55gr	40	40
R/CR-27***	270 mm	4 mm	65gr	40	40
R/CR-30***	300 mm	4 mm	75gr	40	40
R/CR-33***	330 mm	4 mm	85gr	40	40

\*AL series: Saw without sheath.

\*\*ALF Series: Saw with sheath.

\*\*\*R series: saw blade.









### M19 SERIES

The girdling technique consists of interrupting the phloem flow by cutting the bark of the tree in order to temporary prevent the sap from flowing down to the roots. This technique is effective for flowering, increasing fruit set or increasing fruit size.

With our M19 models, girdling is performed by three rotating discs, which will provide a more precise cut and faster healing.

#### Characteristics:

- In contrast to conventional girdling tools that cut by drag cutting, the rotating discs cut without tearing the skin of the fruit tree, allowing a more precise cut and avoiding tearing off part of the bark.
- Each disc scratches one third of the branch, so the operator only has to make a turn of one third, thus reducing working time. With traditional scoring machines, the operator has to make a minimum rotation of half of the bark.
- Plastic-coated handles for improved grip and ergonomics.

	M19/20-55	M19/50-80	M19/80-110
gr	185	220	340
↔	230	270	320
Ø MIN	20	50	80
Ø MAX	55	80	110





## **Calipers**

Made of 4mm thick zinc-plated metal rod. Ideal for field sizing of all types of fruit.

Measures available in mm:

40-43-45-46-47-50-52-54-56-58-60-62-64-65-67-70-73-75-77-81-84-87-90-95-100-105-110

They can be supplied individually or in sets of 6 units:

**SET CALIPERS 50-60** (50-52-54-56-58-60)

SET CALIPERS 62-73 (62-64-65-67-70-73)

## **Grafting tool**

Blade for grafting citrus and other fruit trees. Tempered steel blade and wooden handle. Available in three sizes.

	Pequeño	Mediano	Grande
gr	80	100	105
↔	118	130	140
田	25	25	25





## **Springs**

Availability of spare springs for our shears models. Available in bags of 25 units.

	↔	的
C25 spring	30	25
D25 spring	40	25
E25 spring	50	25

## Replacement cutting disc M19

Replacement cutting discs for the three models of M19 girdling tools.

	图
20mm cutting disc set* M19	3
24mm cutting disc set** M19	3

<sup>\*\*</sup> For M19/80-110



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