

The role of horticulture during COVID-19

By

Dr. Henry A. Akintoye

National Horticultural Research Institute,
Ibadan, Nigeria

Horticultural Fruits

- Horticultural fruits are important crops for the human diet.
- It is a matter of common knowledge that a diet rich in fruits and low in saturated fats is healthy and protective against cardiovascular diseases and certain cancers
- They play an important role in human nutrition and health, particularly as sources of vitamin C, thiamine, niacin, pyridoxine, folic acid, minerals and dietary fibre
- Other vital nutrients supplied by fruits include riboflavin, zinc, calcium, potassium and phosphorus.

Horticultural Fruits

- Fruit consumption helps to prevent human diseases, during childhood and adolescent stages
- Fruit intake has been shown to have positive effects in terms of weight management and obesity prevention
- Adding more fruits to a healthy diet is one possible pathway to reduce blood pressure.



The Global Pandemic

- Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus strain.
- Most people who fall sick with COVID-19 will experience mild to moderate symptoms and recover without special treatment.
- The chance of early recovery is tied to having a fortified immune system that horticultural fruits can provide

Contribution from horticultural fruits

• We will focus on the following fruit crops;

❖ Bananas



❖ Citrus



❖ Papaya



❖ Soursop

❖ Pineapple

❖ Mangoes

Bananas

- *Musa species* (Plantain and Banana) are very nutritious, and also a highly convenient snack food.
- They are rich in fibre, antioxidants and several nutrients.
- A medium-sized banana has about 105 calories and consists almost exclusively of water and carbs
- They are rich in Potassium and Magnesium- two minerals that is essential for heart health — especially blood pressure control.
- Bananas are high in several antioxidants, which may help reduce damage from free radicals and lower your risk of some diseases.

Citrus

- Citrus fruits are an excellent source of vitamin C, a nutrient that strengthens the immune system and keeps your skin smooth and elastic.
- The fruits are very nutritious, offering a host of vitamins, minerals and plant compounds that help keep you healthy.
- They are good sources of soluble fiber, which helps lower cholesterol and aids digestion.
- In addition, they are low in calories, making them a smart choice for people seeking to lose or maintain their weight.
- More importantly, citrus fruits contain plant compounds that can protect against a variety of diseases, including cancer, heart disease, brain dysfunction and kidney stones.

Papayas

- Papayas contain healthy antioxidants known as carotenoids — particularly one type called lycopene.
- Papaya has powerful antioxidant effects, which may reduce oxidative stress and lower your risk of several diseases.
- Papayas are very high in carotenoids that can reduce inflammation.
- They also contain trace amounts of calcium, magnesium and vitamins B1, B3, B5, E and K.
- All these are important to boost the immune system to fight against diseases

Soursop

- Soursop is a fruit that grows in tropical areas, including South America, the Caribbean and parts of Africa.
- It's also known as graviola and custard apple.
- Sour sop has a wide range of health benefits.
- The leaves and root are known to boost your immune system, help soothe stomach ailments and ease hypertension.
- Soursop is also a powerful antioxidant and a good source of vitamin C, B1 and B2.
- The latter two along with magnesium help to boost your energy levels without giving you the dip that is associated with caffeine

Pineapple

- Pineapples are good source of antioxidants, which may reduce the risk of diseases such as heart disease, diabetes and certain cancers.
- They contain bromelain, a group of digestive enzymes that breaks down proteins.
- Many of the antioxidants in pineapple are bound, so they may have longer lasting effects.
- This antioxidants aid digestion, especially in those with pancreatic insufficiency.
- Pineapple also contains compounds that reduce oxidative stress and inflammation, which are linked to cancer.
- Pineapples have anti-inflammatory properties that may boost the immune system especially in arthritis patient.

Mangoes

- Mangoes is a perfect fruit that helps in controlling body cholesterol due to its high content of vitamin C, fibre and pectin.
- It has a low glycemic index, moderate eating enrich blood sugar level.
- It contains antioxidants such as quercetin, fisetin, isoquercitrin, astragalin, gallic acid and methyl gallate which are cancer fighting agents.
- They are enriched with tartaric and malic acids and contain traces of citric acid which helps in maintaining the alkali reserve of the body.
- Mangoes boosts body digestive function and burn unwanted calories from the body, hence, helps in losing extra weight.

Conclusion

- Horticulture is most important to our daily living.
- The human body needs vitamins, proteins and mineral also carbohydrates in their meal or diet.
- The consumption of fruits, vegetables meet this need of human



Thank you for your attention