# MARKET DEMAND STUDY

ON

# Escallion

*For the period 2008-2012*

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## CROP INFORMATION

Escallion (Allium fistulosum L.) is a condiment that is commonly used in Caribbean cuisines. It is one of the major ingredients used in the production of sauces and jerk seasoning by Jamaica's Agro-Processing sector. There are two varieties of escallion in Jamaica, the white stalk variety and red stalk variety. The red stalk variety has more flavour, takes a longer time to grow and is mainly sold in the fresh food market. The white stalk variety is less potent than the red stalk; it grows faster and is mainly sold to agro-processors. In 2012, production of escallion for both varieties stood at 14,142,000 kilograms (kg).

### *Planting*

The crop is usually planted after rain or at any period in irrigated areas. The plants are usually set at 30cm (12inches) apart along rows which are 45 to 50cm (18 to 20 inches) wide. Single healthy plants of medium size are used. These are stripped of all dried outer leaves and roots trimmed. The stalks are set 4cm (1.5inches) deep in the soil and the mulch pulled and pressed against them. The crop is usually grown in pure stands but occasionally it is inter-planted with mainly legumes.

### *Reaping and Cleaning*

The first reaping is usually at 4 to 5 months from planting and subsequently at about every three (3) weeks, depending on weather conditions and market demand. The crop has to be regularly reaped to thin out roots and stimulate new growth. The plants are then stripped of dead leaves, roots and all small stalks removed. The selected stalks are packed away in the shade in an effort to keep the crop dry and cool to prevent rotting.

***Uses***

Harvested for their taste, they are milder than most onions. They may be cooked or used raw as a part of salads, salsas, or Asian recipes. Diced escallions are used in soup, noodle and seafood dishes, as well as sandwiches, curries or as part of a stir fry. Escallion is closely related to leeks and shallots and at times used as a substitute for them both. Escallion is a popular spice that is used to season virtually every Jamaican dish, it is predominantly used in soups, stews, curries and rice and peas among others.

***Medicinal Benefits of Escallion***

While not often recognised for its healing properties, this condiment, though relatively mild, has a number of uses outside the kitchen.

- It is mainly used as a traditional medicine for common cold.
- It stimulates the respiratory tract and helps in expelling sputum (phlegm).
- It contains essential oils that stimulates the sweat glands and promote sweating.
- It normalizes blood pressure.
- It increases appetite.
- It helps prevent diarrhoea.
- It is rich in sulphur, an essential element that kills or inhibits fungus infections.
- It inhibits cancer cell growth especially colon cancer. Escallion's anti-colon cancer properties are well known among traditional healers around the world.
- It contains vitamin A and C. The white part (stalk) of it has calcium.
- It helps speed up blood circulation and absorbs vitamin B1. This helps reduce stress and tiredness.

## Executive Summary

- There are two predominant varieties of escallion in Jamaica, the white stalk variety and red
- Escallion production recorded an increase of 38.80% over the five (5) year period, 2008 to 2012.
- St. Elizabeth and Manchester represented 93.6% of total production of escallion throughout the period 2008-2012.
- According to the Statistical Institute of Jamaica (Statin), since 2010 escallion mash has not been imported into the island.
- The condiment was exported to nine countries over the period 2008-2012. During that period, Canada accounted for 93.71% of our exports.
- Red Stalk escallion is the preferred export variety, accounting for 70% of exports.
- Farmers are the main supplier of escallion to Exporters and Agro-Processors.
- The red stalk variety fetches a significantly higher price than the white stalk variety.
- An increase in the quantity of fresh escallion used by agro processors was seen during the months January, February, October and November compared to the other months.
- During the period 2008-2012, agro-processors did not use imported fresh escallion in their operation.

## PEST AND DISEASE CONTROL

The production of escallion has been concentrated in mostly dry, hot areas with limited water supply, these conditions are ideal for the development of many insects and diseases that may destroy the crop.

**Thrips tabaci** *(Onion thrips)***:** The adults are 2 mm long, pale yellow to dark brown in colour and have fully developed wings. They start feeding by piercing the leaf surface with their mouth to release the liquids from the plant cells, the thrips release substances that help predigest the plant tissues, and with their mouth they suck up the plant content.

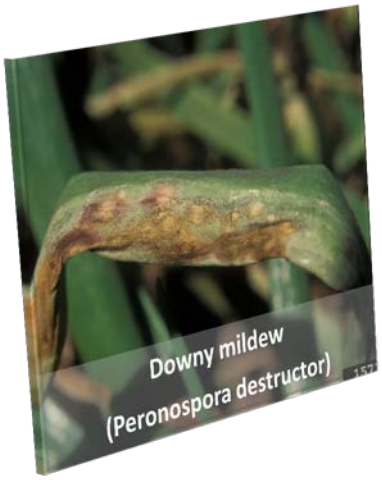
*Chemical control*: In order to reduce pest resistance use as little pesticides as possible. It is important for the product to reach inside the plant base of the leaves where the majority of the thrips are located. Using high pressure and high water volume in the application enables this to occur. Diazinon and cypermethrin are effective against this pest

**Spodoptera exigua** *(Beet army worm):* The younger larvae are pale green or yellow in colour while the older larvae are darker when viewed from above and possess a dark lateral stripe. The forewings of the adult are mottled gray and brown, and normally with an irregular banding pattern and a light coloured bean-shaped spot. Larvae feed on both foliage and fruit. Young larvae feed gregariously and skeletonize foliage. As they mature, larvae become solitary and eat large irregular holes in foliage.

*Chemical control*: Beet armyworm larvae are susceptible to neem products, eggs can be killed with petroleum oil, and both eggs and young larvae can be controlled with foliar applications of 5% cottonseed oil, but this concentration is damaging to some plants. Formulations of Bacillus

thuringiensis (Dipel®, Xentari®, Agree®, NewBt®) can also be used to effectively manage this pest.

**Downy mildew** *(Peronospora destructor)* **and Purple blotch** *(Alternaria porri)*





Symptoms of both diseases are similar. They consist of white to light green spots on leaves, which later darken. A fuzzy, gray growth is seen on the leaf surface, particularly during periods of high humidity. They cause lesions to enlarge and leaf tissue to die.

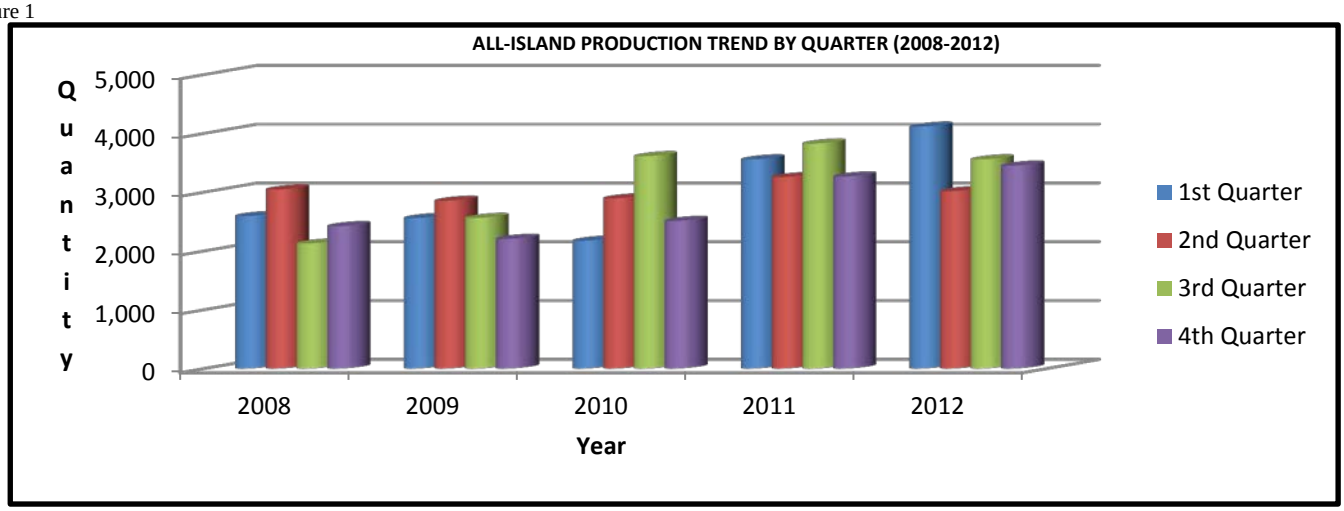
*Control*: The control for both diseases is similar. The mildew can be controlled by keeping foliage dry. Fields should be monitored closely, particularly during prolonged cold or wet weather. Fungicides such as Ridomil and Aliette, should be applied following the first report of downy mildew in the growing area, within the crop's late stage, irrigation methods such as surface, buried drip or T-tape should be used when applying fungicides.

## ALL-ISLAND ESTIMATES OF PRODUCTION (Kg) BY QUARTER (2008-2012)

*Table 1*

| Quarter | Quantity Kg(000) | | | | | Total |
|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | |
| **Jan.-Mar.** | 2,594 | 2,560 | 2,175.1 | 3,557.4 | 4,114.8 | **15,001.3** |
| **April-June** | 3,046 | 2,854 | 2,895.4 | 3,256.3 | 3,018.2 | **15,069.9** |
| **July-Sept.** | 2,127 | 2,561 | 3,611.9 | 3,827.4 | 3,557.9 | **15,685.2** |
| **Oct.-Dec.** | 2,422 | 2,206 | 2,511.3 | 3,266.9 | 3,451.5 | **13,856.7** |
| **Total** | **10,189** | **10,181** | **11,193.7** | **13,908** | **14,142.4** | |

Figure 1




Source: MOAF, Data Bank & Evaluation Division

During the period 2008-2012, the condiment was mostly grown in two parishes (St. Elizabeth and Manchester) as seen in Appendix III, page 32.

Escallion production recorded an increase of 38.80% over the five (5) year period 2008 to 2012. A total of 59,614,100kg was produced over the same period. During the period 2008-2012, a total of 15,685,200kg of escallion was produced within the third quarters, therefore, July-September represents the highest producing quarter when similar quarters were summated over the 2008-2012 period.

## ALL-ISLAND ESTIMATES OF AREA REAPED (2008-2012)

| *Table 2* | Escallion | | | |
|---|---|---|---|---|
| Hectares | | | | |
| **2008** | **2009** | **2010** | **2011** | **2012** |
| 795 | 863 | 989 | 1003 | 1065 |

*Source: MOAF, Data Bank & Evaluation Division*

A total of 4,715 hectares of escallion was reaped during the period 2008-2012. Throughout the period 2008-2012 area reaped moved from 795 hectares in 2008 to 1,065 hectares in 2012, this represents a 33.96% increase.

| *Table 3* | Yield Rates | | |
|---|---|---|---|
| **Year** | **Production (Kg)** | **Area Reaped (Hectares)** | **Yield per Hectare (Kg)** |
| **2008** | 10,189,000 | 795 | 12,816.35 |
| **2009** | 10,181,000 | 863 | 11,797.22 |
| **2010** | 11,193,700 | 989 | 11,318.20 |
| **2011** | 13,908,000 | 1,003 | 13,866.40 |
| **2012** | 14,142,400 | 1,065 | 13,279.25 |
| **Source: MOAF, Data Bank & Evaluation Division** | | | |

In 2012, the yield per hectare was 13,279.25kg representing an increase of 3.61% over 2008 yield which was 12,816.35kg. However, during the period 2008-2012, the average yield per hectare was 12,615.48kg.

## Escallion Profitability

Table 4

| Year | Price (JMD) | | % Difference between C.O.P & Farmgate |
|---|---|---|---|
| | Cost of Production Est. (0.4 hectare) | Farmgate Price (kg) | |
| 2008 | 52.49 | 120.78 | 130.10 |
| 2009 | 73.75 | 68.16 | (7.58) |
| 2010 | 126.5 | 100.98 | (20.17) |
| 2011 | 104.00 | 83.29 | (19.91) |
| 2012 | 80.20 | 119.55 | 49.07 |

Source: MOAF, Agricultural Marketing Information Division (AMID)

Escallion Profitability table indicates that it was profitable to commercially produce escallion at the farmgate level in 2008 and 2012, as those years realized profits of 130.10% and 49.07 % respectively. For the period 2009-2011, farmers producing and selling escallion were operating at a loss not exceeding 20.17%.

### *Escallion Production, Export & Local Consumption 2008-2012*

Table 5

| Year | Production (Kg) | Fresh Escallion Export (Kg) | Exp. % | Assumed Local Consumption (ALC) (Kg) | ALC % |
|---|---|---|---|---|---|
| **2008** | 10,189,000 | 20,391.82 | 0.20 | 10,168,608.18 | 99.80 |
| **2009** | 10,181,000 | 21,999.50 | 0.22 | 10,159,000.50 | 99.78 |
| **2010** | 11,193,700 | 23,445.62 | 0.21 | 11,170,254.38 | 99.79 |
| **2011** | 13,908,000 | 26,663.51 | 0.19 | 13,881,336.49 | 99.81 |
| **2012** | 14,142,400 | 31,944.37 | 0.23 | 14,110,455.63 | 99.77 |
| **Total/Avg.** | **59,614,100** | **124,444.82** | **0.21** | **59,489,655.18** | **99.79** |

Source: MOAF, Data Bank & Evaluation Division and STATIN

For the period of 2008-2012, fresh escallion export represented 0.21% of production. Therefore, the Jamaican escallion is predominantly consumed locally in the fresh market as well as in the agro-processing sector.

## Annual Farmgate Prices by Quarter (2008-2012)

Table 6

| Quarter | Prices($/kg) | | | | |
|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| Jan.-Mar. | 172.39 | 114.07 | 138.51 | 91.81 | 134.46 |
| April-June | 77.70 | 51.49 | 82.25 | 72.45 | 60.56 |
| July-Sept. | 108.00 | 37.63 | 89.60 | 64.60 | 95.35 |
| Oct.-Dec. | 130.93 | 71.92 | 106.39 | 106.70 | 178.29 |
| Average | **122.26** | **68.78** | **104.19** | **83.89** | **117.17** |

Source: MOAF, Data Bank & Evaluation Division

During the period 2008-2012, the annual farmgate prices saw a decline of 4.16%.

## ESCALLION MASH IMPORTED

Table 7

| Escallion Mash Import (2008-2012) | | |
|---|---|---|
| Year | Net Weight (kg) | CIF Jamaica (JMD) |
| 2008 | 145,811 | 15,614,030 |
| 2009 | 63,426 | 8,506,422 |
| 2010 | 16,158 | 2,100,393 |
| 2011 | N.I | N.I |
| 2012 | N.I | N.I |
| Total | 225,395.00 | 26,220,845.00 |

Source Jamaica Customs KEY: N.I-NO IMPORTS

During 2008-2010, a total of 225,395kg of escallion mash was imported at a cost of JMD26,220,845 CIF. Escallion mash was not imported in 2011 and 2012 owing to local availability of the product.

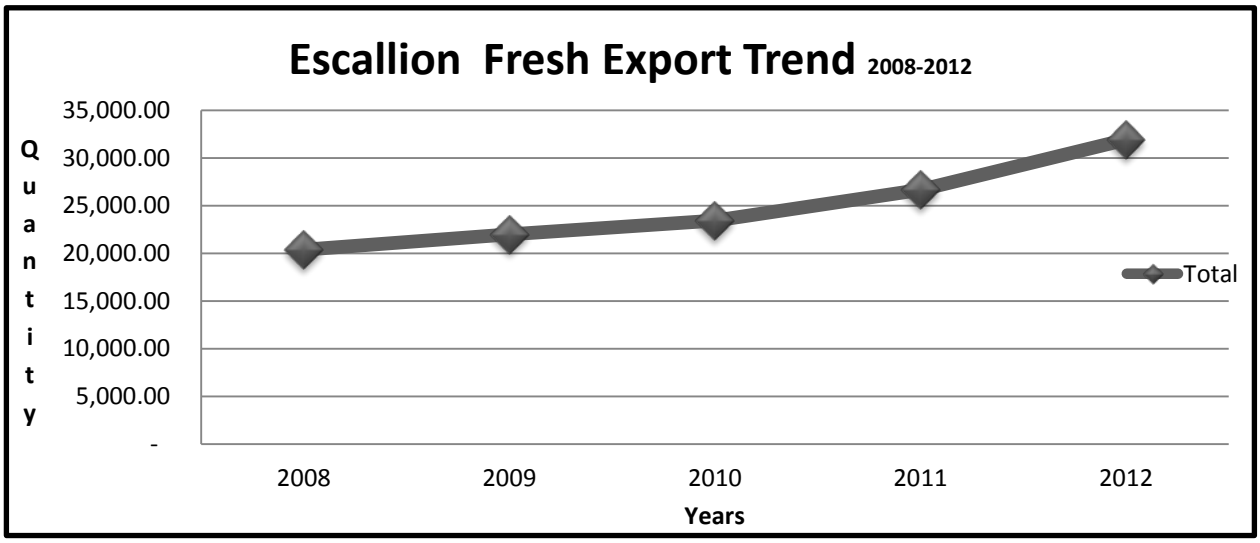
## ESCALLION FRESH EXPORT (Kg)-2008 - 2012

Table 8

| Destinations | Exports by Destination (kg) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | Total | % |
| Canada | 19,854.20 | 20,565.48 | 22,203.91 | 24,023.73 | 29,968.41 | 116,615.73 | 93.71 |
| China | 16.26 | | | | | 16.26 | 0.01 |
| United Kingdom | 437.41 | 1,264.02 | 501.69 | 648.42 | 1,963.96 | 4,815.50 | 3.87 |
| U.S.A. | 83.95 | 170.00 | 729.11 | 1,982.10 | 12.00 | 2,977.16 | 2.39 |
| St. Maarten | | | 10.91 | 9.26 | | 20.17 | 0.02 |
| **Total** | **20,391.82** | **21,999.50** | **23,445.62** | **26,663.51** | 31,944.37 | **124,444.82** | **100.00** |

Source: Plant Quarantine

Figure 2



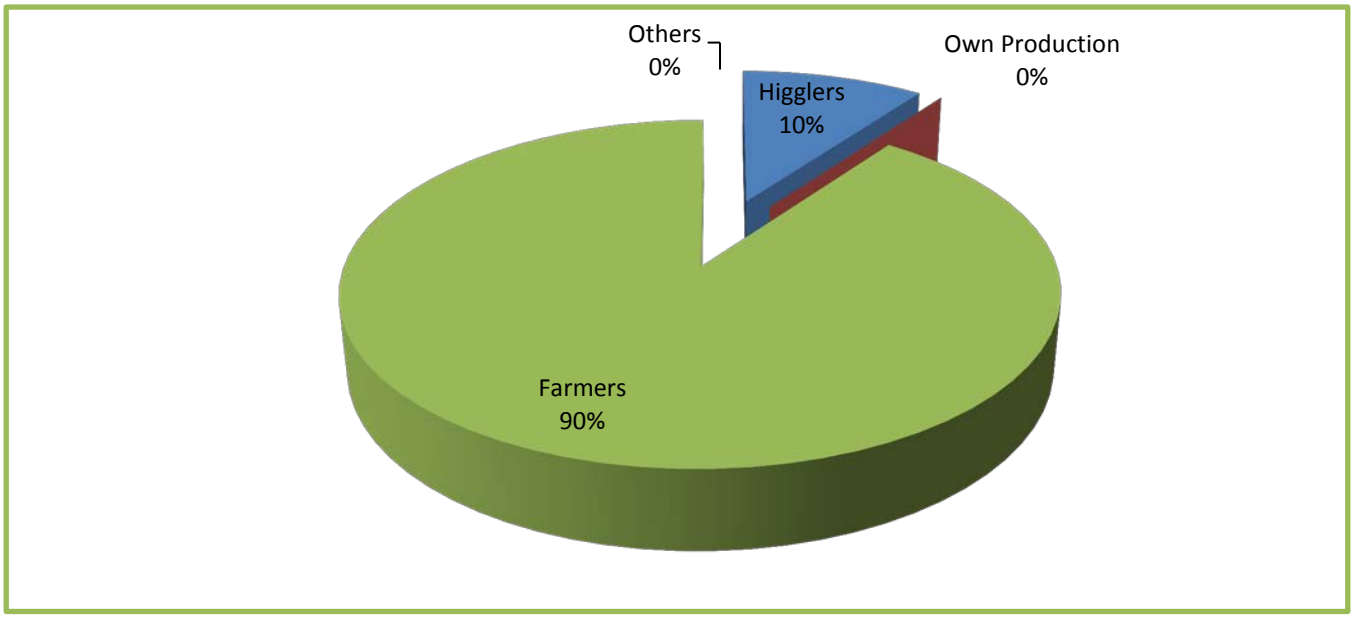

Over the period 2008-2012 escallion fresh export increased by 56.65%. A total of 124,444.82kg of escallion was exported during 2008-2012.

The condiment was exported to five countries over the period 2008-2012. During that period, Canada accounted for 93.71% of exports, United Kingdom 3.87% and U.S.A. 2.39%.

**Survey Findings for Exporters:**

**1.0** Ten (10) Exporters were interviewed in analysing the escallion export process. When asked to identify the variety of escallion they export, Seventy (70) percent stated they export the red stalk variety only, while 30% stated they export both the red and white stalk varieties.

**2.0 Figure 3: Main Suppliers of Escallion to Exporters**




Of the ten (10) exporters interviewed, nine (9) or 90% indicated that farmers are their main supplier of escallion. One (1) respondent indicated that he obtains escallion from higglers.

**3.0 Figure 4: Product Specification for fresh escallion.**

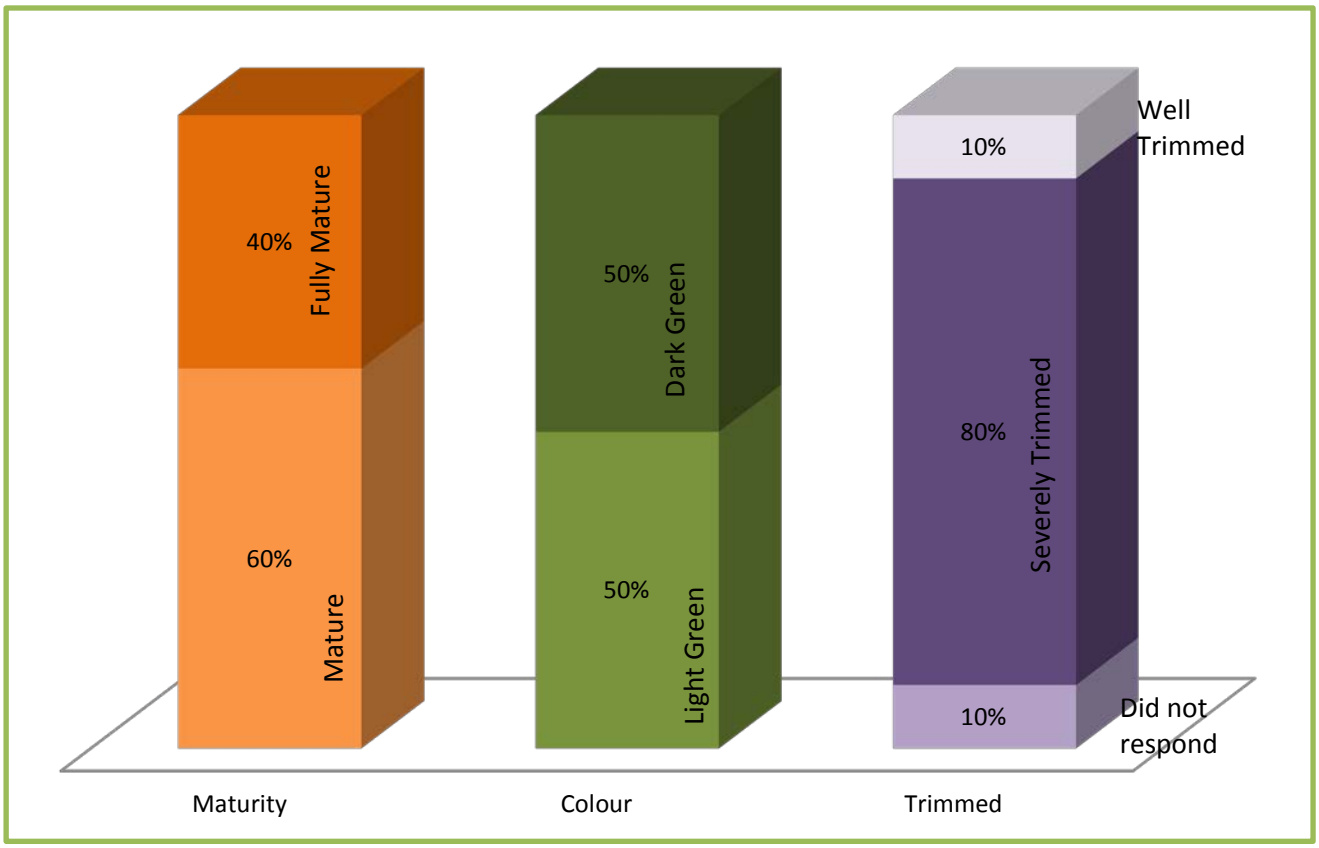



Figure 4 shows exporters standard specification for fresh escallion.

**Maturity**

Sixty percent (60%) indicated that they prefer the escallion received to be mature, 40% preferred it fully mature while no exporter stated they would want to receive immature escallion.

**Colour**

Exporters were asked to state whether they prefer the colour of their escallion to be Green, Light Green or Dark Green. Fifty percent (50%) indicated they prefer it to be light green, another 50% wants it to be dark green.

**Trimmed**

Eighty percent (80%) of the exporters interviewed indicated that they want the escallion received to be severely trimmed, 10% wants it to be well trimmed and 10% did not respond.

**4.0** Exporters were asked to indicate whether they encountered any problem with labelling, packaging, inspection, at local and overseas shipping ports. All exporters indicated that they do not experience any of the stated problems.

**5.0 Shortage in the Supply of Escallion**

Of the 10 exporters interviewed, 5 or 50% stated that they do not experience shortages in the supply of escallion, while 50% indicated they do experience shortages in escallion supply at varying periods. As it relates to the exporters that are experiencing shortage, they were asked to state the months in which the supply of the condiment was limited. February to April, June to August and September to December were identified by 50% of the exporters as the periods when they experienced shortage in the supply of escallion. January and May were the only two months in which the shortage was not experience by any exporter.

**6.0** Of the (5) exporters indicating a shortage in escallion supply, three (3) indicated that it is limiting their company's potential to increase exports.

**7.0** Only one exporter indicated that his consignee had an issue with the quality of the escallion received. The issue related to the condiment decaying two days after receival. All other exporters interviewed, which represents 90% of the respondents indicated that their consignees had no issue with the quality of the Jamaican escallion.

## 8.0 Exporters average purchase price for escallion.

Table 9

| | 2010 | 2011 | 2012 | Variety |
|---|---|---|---|---|
| **Exporters Average Purchase Price for Escallion($/Kg) 2010-2013/Nov.** | $50.00 | $50.00 | $60.00 | White |
| | $75.00 | $75.00 | $100.00 | White |
| | $220.00 | $260.00 | $300.00 | Red |
| | - | - | $176.00 | Red |
| | $200.00 | $210.00 | $230.00 | Red |
| | - | - | $280.00 | Red |
| | $110.00 | $110.00 | $121.00 | Red |
| | $55.00 | $55.00 | $68.00 | White |
| Average | **154.33** | **162.67** | **201.13** | |

A total of eight (8) exporters, representing 80% stated their average prices for escallion while two exporters did not answer this question. The red stalk variety fetches a significantly higher price than the white stalk variety. During the period 2010-2012, the cost of the red stalk variety ranged from $110/kg-$300/kg while white stalk ranged from $50/kg-$100/kg. Exporters were asked to state their current price for escallion in November of 2013, the red stalk variety ranged from $132/kg-$330/kg while white stalk ranged from $65/kg-$70/kg.

As stated before, 90% of exporters indicated that they purchase escallion directly from farmers while 10% get the condiment from higglers, therefore, prices shown in table 9 are largely a reflection of the farmgate prices for the condiment.

## Main Survey Findings for Exporters

During the survey period, October-November/2013, twelve (12) companies exported escallion. Ten (10) of the twelve (12) exporters responded favourable to our survey with a non-response of two. The survey findings indicate that red stalk escallion is the preferred export variety. Seventy percent (70) or seven (7) exporters stated that they only exporter the red stalk variety. The red stalk variety is significantly more expensive than the white stalk variety; exporters indicated that they purchase the red stalk variety within a range of $110/kg-$330/kg compared to the white stalk that cost $50/kg-$100/kg.

Farmers supply 90% of the escallion that is exported, therefore, they are the main suppliers of escallion to exporters, followed by higglers with 10%. The most desired specifications for escallion are mature, light or dark green and severely trimmed.

Thirty percent (30%) of respondents indicated that supply constraints limited their company's potential to increase exports. Seventy percent (70%) did not make note of this issue.

**Survey Findings for Agro-Processors:**

**1.0** Agro-processors were asked to identify the variety of escallion they use in their operation. Sixty-Seven percent (67%) stated that both red and white stalk varieties are used in their operation while 33% stated they only use the white variety.

## 2.0 Agro-Processors monthly usage of escallion.

Table 10

| Fresh Escallion | | Red Stalk | | | Red Stalk Total | White Stalk | | | White Stalk Total |
|---|---|---|---|---|---|---|---|---|---|
| | | 2010 | 2011 | 2012 | | 2010 | 2011 | 2012 | |
| Monthly Quantities used by Agro-Processors (2010-2013/Nov.) | Jan. | 35,239.66 | 35,448.70 | 26,027.33 | 96,715.69 | 88,415.33 | 88,635.37 | 79,239.00 | 256,289.70 |
| | Feb. | 35,039.66 | 35,248.70 | 25,827.33 | 96,115.69 | 88,215.33 | 88,435.37 | 79,039.00 | 255,689.70 |
| | Mar. | 33,239.66 | 33,448.70 | 24,027.33 | 90,715.69 | 68,415.33 | 68,635.37 | 59,239.00 | 196,289.70 |
| | April | 33,039.66 | 33,248.70 | 23,827.33 | 90,115.69 | 68,218.33 | 68,435.37 | 59,039.00 | 195,692.70 |
| | May | 33,239.66 | 33,448.70 | 24,027.33 | 90,715.69 | 68,418.33 | 68,635.37 | 59,239.00 | 196,292.70 |
| | June | 33,039.66 | 33,248.70 | 23,827.33 | 90,115.69 | 68,218.33 | 68,435.37 | 59,039.00 | 195,692.70 |
| | July | 33,239.66 | 33,448.70 | 24,027.33 | 90,715.69 | 68,418.33 | 68,635.37 | 59,239.00 | 196,292.70 |
| | Aug. | 33,039.66 | 33,248.70 | 23,827.33 | 90,115.69 | 68,221.33 | 68,435.37 | 59,039.00 | 195,695.70 |
| | Sept. | 33,239.66 | 33,448.70 | 24,027.33 | 90,715.69 | 68,421.33 | 68,635.37 | 59,239.00 | 196,295.70 |
| | Oct. | 35,039.66 | 35,248.70 | 25,827.33 | 96,115.69 | 88,221.33 | 88,435.37 | 79,039.00 | 255,695.70 |
| | Nov. | 36,039.66 | 36,248.70 | 26,827.33 | 99,115.69 | 89,221.33 | 89,435.37 | 80,039.00 | 258,695.70 |
| | Dec. | 35,039.66 | 35,248.70 | 25,827.33 | 96,115.69 | 88,221.33 | 88,435.37 | 79,039.00 | 255,695.70 |
| Annual Total | | 410,485.92 | 412,995.40 | 299,939.96 | | 922,635.96 | 925,235.44 | 812,480.00 | |

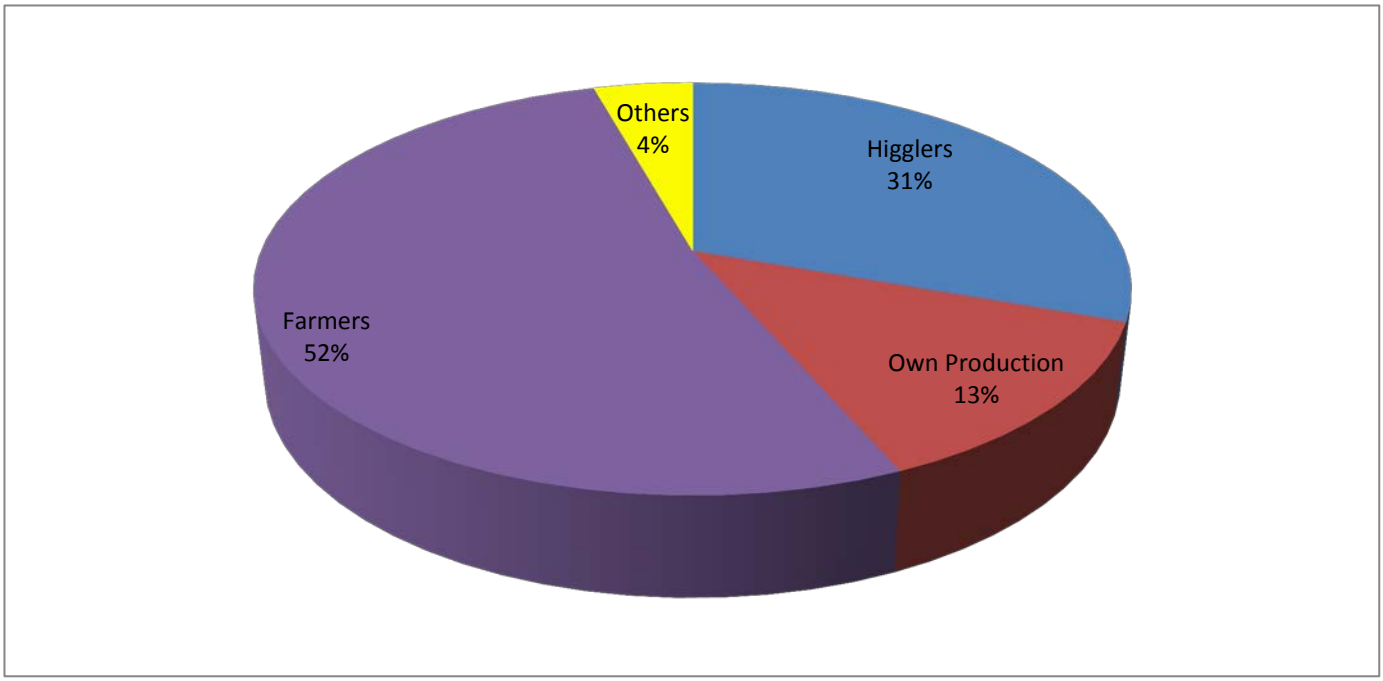
Of the fifteen (15) agro-processors interviewed, thirteen (13), representing 86.67% responded to the question of variety usage.

In 2012, a total of 1,112,419.96kg of escallion was used by 13 agro-processors; this figure represents 7.87% of production for the same year. As stated earlier, in 2012, yield per hectare was 13,279.25kg. Therefore, for the year 2012, agro-processors used 83.80 hectares of escallion; a total of 1,065 hectares was grown that same year. As mentioned earlier, the period surveyed was 2008-2013/November, therefore, a total of eleven (11) months data were collected for both varieties of escallion in 2013 with December being excluded. In 2013, red stalk variety usage was 411,331.81kg while the white stalk variety usage was 872,951.81kg this represent a 51.17% and 19.35% increase over the same eleven month period of 2012 respectively.

**Red Stalk Variety -**There has been a steady increase in the quantity of red stalk escallion used by agro-processors, except for 2012, where there was a decline in the quantities used by agro-processors by 27.37% compared to the previous year of 2011. This is attributed to the infestation of the crop by the beet army worm. The monthly usage shows that more red stalk variety was used during the months January, February, October and November compared to the other months.

**White Stalk Variety-** As with the red stalk variety, in 2012, there was a decline in the quantities used by agro- processors by 12.19% compared to the previous year of 2011. Similarly in January, February, October and November, we see that agro-processors use more of the white stalk variety compared to other months.

**3.0 Figure 6: Main Suppliers of Fresh Escallion to Agro-Processors**




Farmers are the main suppliers of escallion to Agro-processors followed by higglers. One respondent stated that in addition to farmers being their main supplier, Grace Food Processors also supplies them with escallion.

**4.0** Agro-processors were asked if they experience a shortage in the supply of escallion periodically. Six respondents, representing approximately 40% stated that they do experience a shortage in the supply of escallion, each respondent stated a different month in which the shortage was experienced. Other respondents made mention of a disruption in supply due to natural disasters, pest (Beet Army Worm) and high prices. All the other agro-processors interviewed indicated that they do not experience a shortage in the supply of escallion periodically.

**5.0 Figure 7: Product Specification for fresh escallion and escallion mash.**

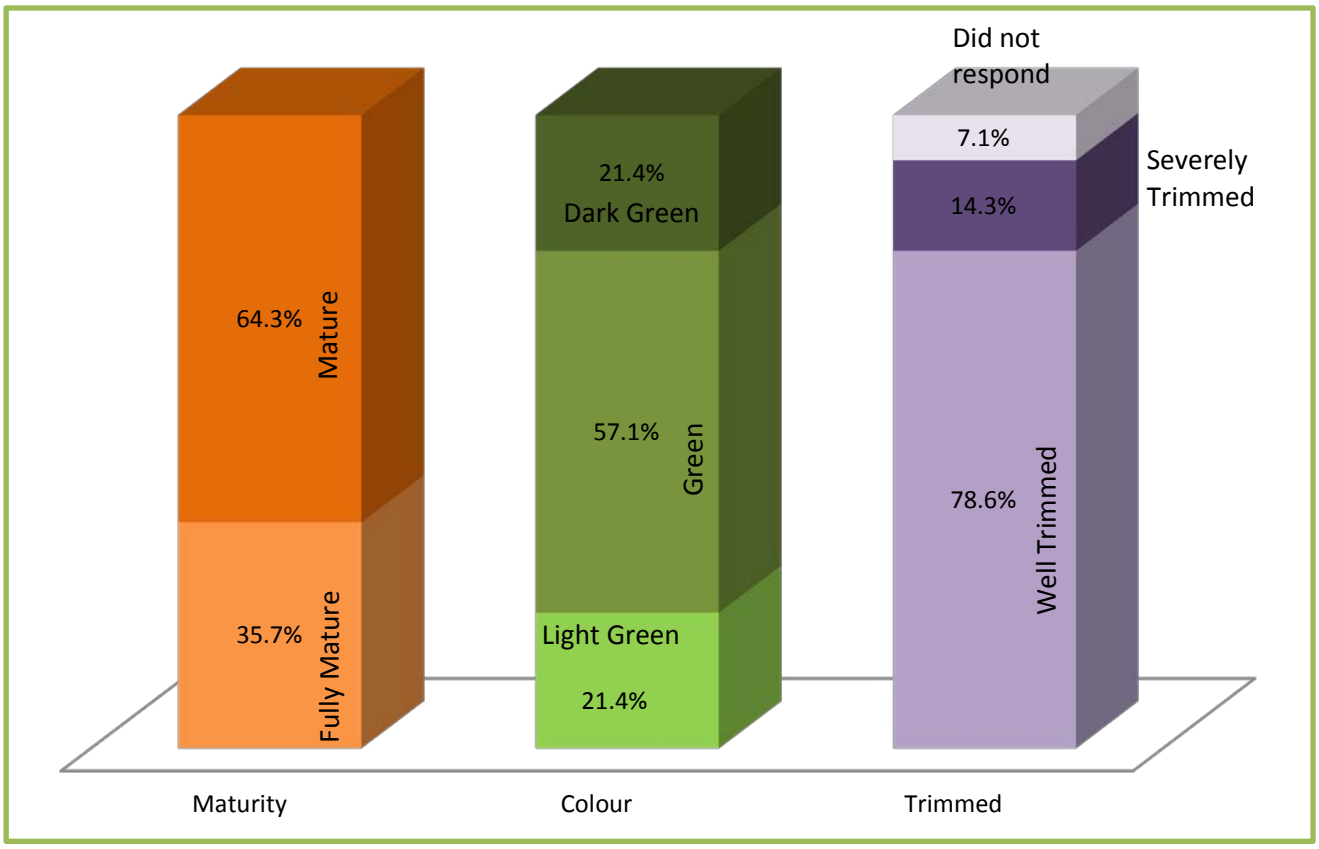



Figure 7 shows Agro-Processors standard specification for fresh escallion.

**Maturity**

Sixty-four point three percent (64.3%) indicated that they prefer the escallion to be mature, 35.7% rather it to be fully mature while no Agro-processor stated they would want to receive immature escallion.

**Colour**

Agro-processors were asked to state whether they prefer the colour of their escallion to be Green, Light Green or Dark Green. Fifty seven point one percent (57.1%) indicated they prefer it to be green, 21.4% wants it to be light green and another 21.4% prefers it to be dark green.

**Trimmed**

Seventy eight point six percent (78.6%) of the agro-processors interviewed indicated that they want the escallion received to be well trimmed, 14.3% wants it to be severely trimmed and 7.1% did not respond.

**Escallion Mash**

Two agro-processors made mention of escallion mash being of a particular production specification, of those two agro-processors, one only made mention of the escallion mash being 13% salt while the other stated that the salt content should be 12%, acidity 3% , coliform zero tolerance and free from extraneous matter .

**6.0** Agro-processors were asked if there are any product specific problems with locally produced fresh escallion. Of the fifteen (15) agro-processors interviewed, no one indicated that they encountered product specific problems with locally produced fresh escallion. Therefore, it can be concluded that agro-processors are satisfied with the quality of locally produced fresh escallion.

***6.1.*** **Product specific problems with locally produced escallion mash.**

There were no product specific problems with locally produced escallion mash according to all the agro-processors surveyed. All agro processors use locally produced escallion mash. However, (13) or 86.67% of agro-processors mash the escallion themselves and use it in their manufacturing process while only two did not engage in the manufacturing of escallion mash.

**7.0** Respondents were asked to identify product specific problems with escallion mash and fresh escallion. All the agro-processors interviewed indicated that there were no product specific issues with these items.

## 8.0 Agro-processors average purchase price for escallion.

Table 11

| Years | 2010 | 2011 | 2012 | Variety |
|---|---|---|---|---|
| Agro-processors average purchase price for escallion ($/Kg) 2010-2013/Nov | $99.00 | $99.00 | $99.00 | Red/White |
| | $121.00 | $121.00 | $121.00 | White |
| | $60.00 | $60.00 | $70.00 | Red/White |
| | $110.00 | $198.00 | $242.00 | Red/White |
| | $99.00 | $99.00 | $99.00 | White |
| | | $35.00 | $35.00 | White |
| | | | $30.00 | Red/White |
| | | | | White |
| | | | $110.00 | Red/White |
| | $38.00 | $38.00 | $30.00 | Red/White |
| | $77.18 | $82.69 | $88.20 | Red/White |
| | $88.00 | $88.00 | $88.00 | White |
| | $60.50 | $60.50 | $60.50 | Red/White |
| | $88.00 | $88.00 | $88.00 | Red/White |
| | $35.00 | $35.00 | $35.00 | Red/White |
| Average | $79.61 | $83.68 | $85.41 | |

| KEY | |
|---|---|
| | No Price |

All agro- processors interviewed stated their average prices for fresh escallion.

During the period 2010-2012, the average prices for escallion increased by 7.29%. Sixty-seven point seven percent (67.7%) of agro-processors interviewed do not separate the different varieties of escallion in their operation. Agro-processors were asked to state their current price for escallion in November of 2013, the average price obtained was $81.68/kg

As shown in figure 6, page 21, farmers and higglers account for 83% of the escallion supplied to agro-processors; therefore, prices shown in table 11 are predominantly a reflection of the farmgate prices for the condiment.

**9.0 Annual usage for 2008 and 2009 of fresh escallion.**

Table 12

| | 2008 | 2009 |
|---|---|---|
| Respondents usage for fresh Escallion(kg) | 48,120.00 | 48,120.00 |

Seventy-three point three percent (73.30%) of respondents were not able to state their usage quantity of escallion in 2008 and 2009; this is largely due to them not being able to locate records. Therefore, table 12 represents only 26.70% of respondents who were able to provide information regarding their escallion usage for 2008 and 2009.

**10.0** Agro-processors were asked if they utilize imported fresh escallion, all respondents stated they do not use imported fresh escallion in their operations.

**10.1** Agro-processors were asked if they utilize imported escallion mash, all respondents stated they do not use imported escallion mash in their operations. According to the Jamaica Customs, escallion mash has not been imported since 2010 (see Table 6, Page 11), however, in 2008 and 2009 a total of 225,395.00kg of escallion mash was imported.

**11.0** Respondents were asked to state the quantity of fresh escallion and escallion mash imported. In relation to fresh escallion, all agro-processors indicated that they do not

import the condiment. As it relates to escallion mash, all respondents stated they do not use imported escallion mash in their operations.

## Main Survey Findings for Agro-Processors

A total of 16 agro-processors were contacted, 15 responded to our questionnaire, one did not.

The survey findings indicate that 67% use both the red and white varieties of escallion in their operations while 33% use only the white variety. Farmers are the main supplier of the escallion used by agro-processors, accounting for 52% followed by higglers with 31%. In relation to the most desired specifications for fresh escallion, agro processors indicated that they prefer it to be mature, green and well-trimmed.

All agro-processors interviewed indicated that they do not encounter any product specific problem with locally produced fresh or escallion mash.

Six agro-processors (40%) responded that they do experience shortages in the supply of escallion while sixty percent (60%) did not make note of this issue.

All agro-processors interviewed stated that they do not utilize imported fresh escallion.

## Recommendation

Escallion is one of those crops that are available year round, providing there are no natural disasters and pest/disease issues.

- The issue of glut, particularly with the white stalk variety of escallion has long affected the escallion industry. More needs to be done to either, sensitize farmers on when to plant the commodity or provide additional markets for this variety of escallion.
- Thirty percent (30%) of exporters surveyed stated that they had issues in obtaining the desired quantity of escallion and that it is limiting their company's potential to increase exports. Our recommendation is that there needs to be a greater linkage between exporters and escallion farmers, predominantly those farmers who produce the red stalk variety of escallion; so as to increase the availability of the commodity to the escallion exporters.
- Greater focus needs to be placed on creating more overseas markets for escallion agro-processors especially for Jerk Sauce. Agro-processors interviewed have the capacity to increase their production of jerk sauce but they are unable to find markets.

# Appendix I

## SURVEY OF ESCALLION EXPORTERS AND AGRO-PROCESSORS

**Methodology**

*Exporters*

A list of escallion exporters was obtained from the Ministry of Agriculture and Fisheries, Plant Quarantine/Produce Inspection Division. A total of twelve (12) active exporters of escallion was identified. A survey was then conducted to identify the demand for escallion by exporters. Of the 12 active exporters contacted, ten (10) responded to our questionnaire, two (2) did not.

*Agro-Processors*

A list of escallion agro-processors was obtained from the Ministry of Agriculture and Fisheries, Agricultural Services Unit. A total of sixteen (16) major and/or consistent agro-processors of escallion was identified. A survey was then conducted to ascertain the demand for escallion by agro-processors. Of the 16 agro-processors contacted, 15 responded to our questionnaire, one did not.

**Primary Data Collection**

**1)** Two questionnaires were designed to capture data from both exporters and agro-processors. Each exporter received the questionnaire at the Plant Quarantine Offices in Kingston and Montego Bay while the agro-processors questionnaires were emailed or delivered to the respondent's work place.

**Data Processing**

The data was eventually tabulated, analysed and a report was compiled. The primary data collection period of this survey was October to November of 2013.

# Appendix II

| Exporters of Escallion | | | |
|---|---|---|---|
| **Respondents** | | | |
| **Company** | **Contact Name** | **Location of Company** | **Telephone #** |
| AMB Investment Ltd | Anthony Mcleish | 15 Lancaster Road, Kgn 10 | 372-5299 |
| Campbell's Green Inc. | Rupert Campbell | Morant Bay, St Thomas | 856-7472 |
| Calabash Farms Ltd | Orville Haynes | 12 Hagley Park Rd, Kgn 10 | 382-4864 |
| Earth Strong Ja. Ltd | Milton Gray | 39 Rodwell Terrace, Kgn 9 | 469-3433 |
| Sir P Food and Fruits | Serena Hamilton | Burnt Ground, Hanover | 410-1581/390-4046 |
| Jamaica Farm Export | George Stample | 22 Fenbrook Ave, Kgn 20 | 898-4692 |
| Duryca Exports | Carl Samuels | Little London, Westmoreland | 375-1219 |
| Paul Crawford | Paul Crawford | Tank Rd. Montego Bay | 386-4521 |
| Aubrey Allen | Aubrey Allen | Unavailable | Unavailable |
| Carita Ja. Ltd. | Rita Symes | 188 Spanish Town Rd. Kgn | 923-7050 |
| **Source**: Ministry of Agriculture and Fisheries, Exporters of Escallion Survey. Oct. to Nov./2013 | | | |

| Agro-Processors of Escallion | | | |
|---|---|---|---|
| **Respondents** | | | |
| **Company** | **Contact Name** | **Location of Company** | **Telephone #** |
| King Pepper Products Ltd | Christine Wong | Falmouth, Trelawny | 954-4462 |
| Spur Tree Spices | Dennis Hawkins | Marcus Garvey, Kinsgton | 758-5263 |
| Exotic Products | Nathan Budhi | Danvers Pen, St. Thomas | 413-8102/706-5505 |
| Backayard Marketing | Jeremariah Dehaney | Hanover | 840-9458 |
| Canco Ltd | Patrick Buchanan | Seaforth, St. Thomas | 619-0560 |
| Southside Distributors Ltd | Denise Palmer | Junction, St. Elizabeth | 965-5361 |
| Southern Fruits and Food | Derrick Rochester | B.Savanah, St. Elizabeth | 965-8060/965-5982 |
| Grace Argo-Processors | Junior Ebanks | Hounslow, St. Elizabeth | 322-6041 |
| Sue-Tru Caribbean Manufacturers | Suzette Thomas | Morant Bay, St. Thomas | 486-3226 |
| Ashman Food Products | Ira Ashman | Bushy Park, St. Catherine | 705-0189/705-0188 |
| Stanmark Processors | Canute Stanmark | Yallahs, St. Thomas | 706-3344 |
| Walkerswood | Mr. Jason Grant | Walkerswood, St. Ann | 917-2318-9 |
| Central Food Packers | Paul Bravo | P.O Box 75, Kinsgton | 984-3118 |
| Tijule Ltd | Elizabeth Fitzgerald | Sandy Bay, St. Catherine | 986-9598-9 |
| Florishae Farms | Dionne Mcleod | Portland | 417-4397 |

**Source**: Ministry of Agriculture and Fisheries, Agro-Processors of Escallion Survey. Oct. to Nov./2013

# Appendix III

| Parish | Production by Parish Kg(000) | | | | | |
|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
| Kgn & St. Andrew | 223.0 | 230.2 | 196.5 | 228.5 | 366.4 | **1244.6** |
| St. Thomas | 181.0 | 232.8 | 330.0 | 385.3 | 418.8 | **1547.9** |
| Portland | 3.6 | 11.4 | 8.2 | 8.6 | 7.2 | 39.0 |
| St. Mary | 10.8 | 1.8 | 2.2 | 0.0 | 0.0 | 14.8 |
| St. Ann | 8.2 | 26.4 | 35.4 | 75.2 | 46.0 | 191.2 |
| Trelawny | 43.2 | 54.3 | 76.7 | 73.7 | 47.2 | 295.1 |
| St. James | 0.0 | 0.0 | 4.2 | 3.0 | 13.8 | 21.0 |
| Hanover | 0.0 | 0.9 | 6.4 | 14.9 | 16.7 | 38.9 |
| Westmoreland | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 2.0 |
| St. Elizabeth | 5335.0 | 5407.7 | 6246.0 | 8149.2 | 8238.5 | **33376.3** |
| Manchester | 4332.0 | 4102.6 | 4194.1 | 4903.3 | 4910.0 | **22442.0** |
| Clarendon | 6.4 | 9.2 | 51.9 | 11.0 | 15.4 | 93.9 |
| St. Catherine | 46.5 | 103.4 | 42.1 | 54.3 | 62.4 | 308.7 |
| Total | 10,190 | 10,181 | 11,193.70 | 13,908.00 | 14,142.4 | 59,615.1 |

## References


- ✓ Ministry of Agriculture and Fisheries, Agricultural Marketing Information Division (A.M.I.D) Production Quantities
- ✓ Food & Agriculture Organization (FAO) Statistical Database, Export Quantities
- ✓ Caribbean Agricultural Research and Development Institute (CARDI), Escallion Production
- ✓ Customs, Export Quantities, Escallion Mash.
- ✓ Ministry of Agriculture, Plant Quarantine/ Produce Inspection Division-Export Data
- ✓ Jamaica Statistical Institute of Jamaica (STATIN)