Profile of **HIBISCUS PLANT**

Compiled by: Directorate Agro-processing Support

2016



agriculture, forestry & fisheries

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1. INTRODUCTION

In the era of global trade, whereby competiveness plays a major role in the survival of an agri-business, the exploration of niche markets or products has become a priority to support sustainable production. Sustainability, amongst others, is predominately seen as a reason to support agri-business specialising in niche products. The purpose of this paper is to provide an overview of Hibiscus, what it is and its uses. It further provides a brief market analysis of Hibiscus, looking at global, regional and South Africa's trade patterns of Hibiscus.

1.1 Description of Hibiscus

Globally, Hibiscus, also known as roselle, is a plant which is cultivated primarily for the use of its flower, leaves and seeds (Mahadevan *et al*, 2009). Hibiscus is seen as an ideal plant in particular for developing countries given its easiness to grow. Moreover, it can be grown as part of multi-cropping systems (Da-Costa-Rocha *et al*, 2014). In South Africa, according to SANBI (2016), Hibiscus, commonly called Rosemallow, is a large genus of about 200-220 species belonging to the *Malvaceae* family, which includes members such as cocoa, cotton, okra, baobab and durian.

It is native to warm temperate, subtropical and tropical regions throughout the world. About 59 species of Hibiscus occur in South Africa. The habitat of common hibiscus species is mainly in Limpopo, Mpumalanga, KwaZulu-Natal and the Eastern Cape provinces. They range from shrubs and trees to highly aromatic herbs. Although many Hibiscus species worldwide are popular garden plants, most of those grown in gardens are not indigenous to South Africa.

The plant is used widely for health purposes. It is used for the treatment of cardiac and nerve diseases and has been described as a diuretic. Drinking Hibiscus tea for the treatment of hypertension is a popular practice. Hibiscus tea helps with relief form high blood pressure and high cholesterol. It further helps with digestive, immune system, and inflammatory problems. Hibiscus tea is said to be rich in vitamin C, minerals and various antioxidants, while also helping in the treatment of hypertension and anxiety (Wolters Kluwer Health, 2006).

1.2 Processing of Hibiscus

The commercially important part of the plant is the fleshy calyx (sepals) surrounding the fruit (capsules). The whole plant can be used as a beverage, or the dried calyxes can be soaked in water to prepare a colourful cold drink, or may be boiled in water and taken as a hot drink (Mohamed et al., 2012). Fresh Hibiscus is edible, can be chopped and added to salads or cooked as a side dish. However, it can be "dried and frozen" for preservation purposes.

Hibiscus can further be processed to make juice and wine, sauce or syrup, tea and seeds (Plotto, 2004). Figure 1 and 2 show a flower and calyx of the Hibiscus plant, respectively.



1.3 Primary and secondary hibiscus products

Figure 3: Primary and secondary hibiscus products



1.4 Preparing Hibiscus calyx

Figure 4 below shows the steps for the processing of Hibiscus calyx. In preparing the calyxes the following steps apply: (1) picking up the ripe calyxes, (2) separating the calyx from the pod, (3) drying the calyx, and, lastly, (3) saving the seeds.



2. Market analysis for Hibiscus

The major exporters of Hibiscus, as indicated in Figure 5, are China, India and Germany, with a market share of approximately 36.7%, 8.1% and 5.6%, respectively, over the period 2012-14. The top three exporters constitute about 50.4% of the world exports of Hibiscus. The total world exports of Hibiscus average around R25.54 billion. The export market of Hibiscus is concentrated, with an evident domination by China.



Figure 5: Top 5 major exporters of hibiscus (HS 121190) over a period, 2012-2014

Figure 6 shows the five major importers of Hibiscus over a period 2012-14. The imports of Hibiscus averaged around R24.19 billion. The USA, Germany and Japan are the major top three importers of Hibiscus, with a respective market share of 12.8%, 9.2 and 8.8% over the period under review. Unlike a concentration of exports, the import of Hibiscus is fairly disaggregated, with the top three importers constituting a roughly 30.8% share of the total imports.

Source: ITC Trademap, 2016



Figure 6: Top 5 major importers of hibiscus (HS 121190) over a period, 2012-14

Figure 7 & 8, respectively, show top 10 exporters and importers of Hibiscus in Africa over the period 2013-15. Egypt is both a leading exporter and importer of Hibiscus in Africa. Morocco is the second leading exporter, with Nigeria occupying a third place. Moreover, South Africa ranked 6th as an exporter of Hibiscus, while it ranked 3rd as an importer of Hibiscus over the period 2013-15.



Figure 7: Top 10 major exporters of hibiscus (HS121190) in Africa over a period, 2013-15

Source: ITC Trademap, 2016

Source: ITC Trademap, 2016





Source: ITC Trademap, 2016

South Africa's export of Hibiscus appears volatile, with the imports showing stability over the period from 2007 to 2015. SA's exports of Hibiscus, as shown in Figure 9, range from R40 million to R109.7 million, while imports range from R14 million to R42 million under the reviewed period. Between 2014 and 2015, there was rapid rise in exports from R40 billion in 2014 to R108 billion in 2015. In overall, South Africa has a positive trade balance, with the lowest points recorded in 2009 and 2014. In 2015, the main export destinations for South Africa were the USA, Germany and the United Kingdom, while imports came from India, Egypt and Poland.



Figure 9: South African imports and exports of hibiscus (HS 121190) over a period, 2007-15

Source: ITC Trademap, 2016

3. Conclusion

Hibiscus plant is native to tropical regions, with its wide ranging uses such as edible or medical use. The world export of Hibiscus is dominated by China with a market share of about 36.7 % over the period 2012-14. In contrast to exports, the import of Hibiscus is disaggregated, with the top three importers constituting a market share of approximately 30.8%. However, South Africa continues to sustain a positive trade balance in Hibiscus, though with high volatility in its exports. The USA, Germany and the United Kingdom are South Africa's main export markets of hibiscus.

4. Reference

- Da-Costa-Rocha I, Bonnlaender B, Sievers H, Pischel I, & Heinrich M.(2014) Hibiscus sabdariffa L. - A phytochemical and pharmacological review. Food Chem, 165:424-43.
- 2. Krugerpark, 2016. Wild Hibiscus. Accessed from: http://www.krugerpark.co.za/africa_wild_Hibiscus.html on 04 April 2016
- 3. Mahadevan, N., Shivali, K.P. (2009). Hibiscus sabdariffa Linn: An overview. Natural Product Radiance, 8: 77--83.
- Mohamed, B. B., Sulaiman, A. A., & Dahab, A. A. (2012). Roselle (Hibiscus sabdariffa L.) in Sudan, cultivation and their uses. Bulletin of Environment, Pharmacology and Life Sciences, 1(6), 48–54
- 5. Plotto, A. (2004). Hibiscus: Post-Production Management for Improved Market Access. Food and Agricultural United Nations.
- 6. SANBI ,2016. Hibiscus pedunculatus L.f. Accessed from: http://plantzafrica.com/planthij/Hibiscuspen.htm, on 04 April 2016.
- 7. Tyrant Farms, 2013. Hibiscus: A tasty addition to your edible landscape or garden Accessed from: .https://www.tyrantfarms.com/hibiscus-a-tasty-addition-to-youredible-landscape-or-garden/, on 25 April 2016.
- 8. Wolters Kluwer Health, 2006. Hibiscus. Accessed from: http://www.drugs.com/npc/hibiscus.html , on 06 May 2016.
- 9. Figure 1 Source: Kruger park, 2016
- 10. Figure 2: Source: Tyrant Farms, 2013

5. Data sources:

1. http://www.trademap.org/Index.aspx