O 29. THE ECONOMIC EFFECTS OF THE COVID-19 PANDEMIC ON ORNAMENTAL PLANTS SECTOR IN TURKEY

Aysegul Hannigan^{*1}, Kubra Yazici²

¹Republic of Turkey Ministry of Agriculture and Forestry Atatürk Horticultural Central Research Institute, Yalova Turkey ² Yozgat Bozok University, Agriculture Faculty, Landscape Architecture Dept, Yozgat, Turkey

E-mail: aysegul.hannigan@gmail.com

ABSTRACT: Covid-19, also known as the corona virus, first appeared in November of 2019, in the city of Wuhan located in Hubei province of China. During the earliest moments of Covid-19, people were unable to guess at the radical changes in day-to-day life. However, as Covid-19 swept across the world, it has become clear that there are tremendous changes in many areas. Especially in that of health, education, economy, consumer behaviour, and social life. Another area that has been damaged by Covid-19 is the ornamental plant sector. Ornamental plant production began to gain importance in the early 20th century throughout the world and has persisted until now. Turkey has important advantages in ornamental plant cultivation, due to its favourable climate and geographical conditions, proximity to market countries and cheap labour. In Turkey, the ornamental plant sector improves every year in terms of production amount and production area. However, due to Covid-19, consumption habits have changed and this has affected the ornamental plant sector. In this study, the importance of ornamental plants on the environment and human beings, and the effects of Covid-19 on the ornamental plant sector in Turkey were evaluated.

Keywords: Covid-19, Ornamental Plants, Environment and Human

INTRODUCTION

Ornamental plant cultivation is a subsection of agriculture that appeals to a person's aesthetic needs of instead of their dietary needs. It distinguishes itself from other agricultural products in that it imbues one's environs with a natural, bucolic beauty. As such, ornamental plants are indispensable to us as humans and have a consumption potential in each season of the year (Kelkit 2002). The emergence of ornamental plants as a subsector of plant production sector coincides with the beginning of the 20th century. Urbanization has played the biggest role in this process. In addition, today, it is thought that there is a linear relationship between the development of the ornamental plant sector and a countries education level, gross national product value per individual, and other development criteria (Ay, 2009; Gülgün & Yazici, 2016). The historical development of the ornamental plant sector in Turkey began in and around Istanbul during the 1940s as urbanization accelerated, similar to that of other countries. Later, the sector expanded to the Aegean and Mediterranean regions with suitable climatic characteristics. With an export value of nearly 81 million dollars, ornamental plants have become an important plant production sub-sector for Turkey in modern times.

TURKEY 2018-2020 ORNAMENTAL PLANTS SECTOR

Süsbir (2019) has reported that the production areas of ornamental plants increased 2.5 times between 2002 and 2017 in Turkey. Despite this increase, the sector needs a greater production area to achieve its goals. The production areas of the sector largely consist of small plots of land, as they do in agriculture in general. Most of the land used in production is rented and this is reportedly the reason why the sector has been prevented from receiving many necessary infrastructure investments. When the production amount and area of 2018-2020 is examined, the effects of the Covid-19 pandemic process can also be evaluated. The area where ornamental plants are cultivated and the level of production in Turkey are given in Figure 1 and Figure 2.

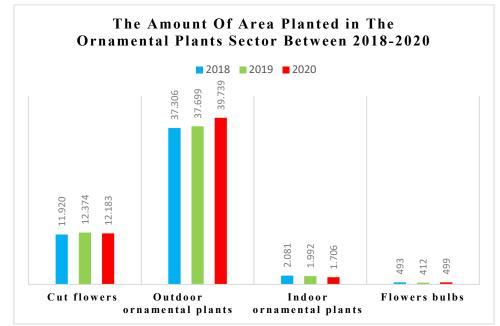


Figure 1. The Amount of Area Planted in the Ornamental Plants Sector between 2018-2020 (da) (Tuik,2020)

According to Tuik (2019), ornamental plant production increased by 0.4% in 2019 when compared to the previous year. When we subdivide the sector into cut flowers and ornamental plants, we can see that cut flowers represent 63.6% of the sector and other ornamental plants represent 36.4%. Cut flower production increased by 3.6% compared to the previous year, while outdoor ornamental plant production decreased by 14.1%.

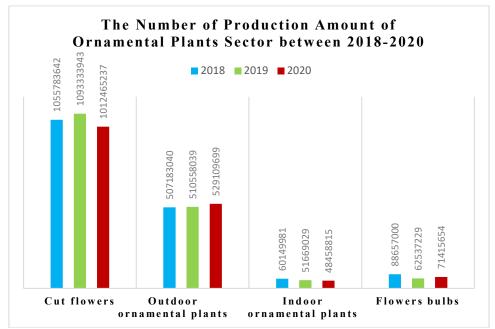
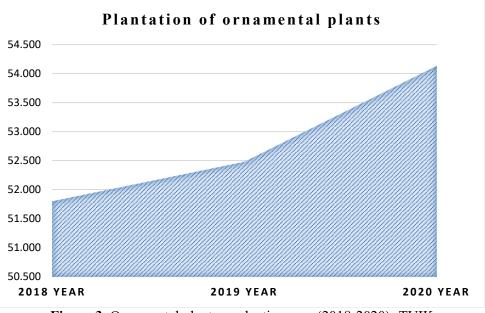
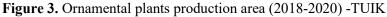


Figure 2. The Number of Production Amount of Ornamental Plants Sector between 2018-2020 (Tuik,2020)

While the production of cereals, vegetables, and fruits increased when compared to the previous year, according to Tuik's (2020) data, the production of ornamental plants decreased by 3.5% in 2020 when compared to 2019. When the subdivisions in ornamental plant production are examined, cut flowers have a share of 60.9% and other ornamental plants have a share of 39.1%. Outdoor ornamental plant

production increased by 3.6% compared to the previous year, cut flower production decreased by 7.7% and indoor ornamental plant production decreased by 6.2%.





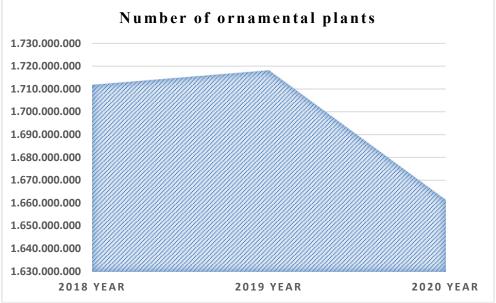


Figure 4. Number of ornamental plants production (2018-2020) -TUIK

According to the Ornamental Plants Producers Sub-Union (SÜSBİR), at the onset of the corona virus (COVID-19) pandemic, people eschewed ornamental plans and turned toward basic food and hygiene products. As such, the ornamental plant sector was negatively affected by the situation. It has also been stated that, as people have come to terms with the quarantine in 2021 and the arrival of spring, the demand for ornamental plants has begun to increase. During the pandemic period, the use of ornamental plants in people's homes, gardens, and balconies has grown considerably. People's desire for a piece of nature in their homes has increased the demand for ornamental plants. Due to the lockdown of many countries borders, the export of ornamental plants has declined precipitously and the imports to Turkey to stop. Süsbir's Chairman of the Management stated that: "Just as the sales stopped when the doors were closed, our exports grew rapidly after the curfew was lifted and borders were opened." An increase

in the demand for the ornamental plant sector in 2021 due to the fact that ornamental plants are an alternative therapy method (Url, 1).

EFFECTS OF ORNAMENTAL PLANTS ON ENVIRONMENT AND HUMAN RELATIONS

Ornamental plants can be divided into four groups: outdoor ornamental plants, indoor ornamental plants, cut flowers, and natural flower bulbs, depending on the usage. The positive psychological effects of outdoor ornamental and indoor ornamental plants on humans has also been noted in the literature. Some of the more remarkable research will be noted here. Montacchini et al. (2017) have determined that indoor ornamental plants play an important role in the psychological health, comfort, and physical health of the occupants as well as the quality of the space. Also, Sezen et al. (2017) determined that plants used indoors in Erzurum have a positive effect on the psychology of individuals, while it has been reported that indoor plants bring vitality to the environment, change the atmosphere, and eliminate monotony. In many studies, it has been stated that ornamental plants used in indoor spaces provide psychological, aesthetic, and physical benefits (Ulrich, 1981; Ulrich, 1991; Ulrich & Parsons, 1992; Ulrich & Simons, 1986). Bringslimark et al. (2007) reported that indoor ornamental plants have psychological benefits in the workplace. Studies on outdoor ornamental plants usually pertain to the green area effect as a whole. Van den Berg et al. (2010) reported in another study that green areas and ornamental plants provide significant psychological contributions to human life.

CONCLUCION

Ornamental plants are an important sector in Turkey as well as in the world due to the fact there is an innate need for green spaces that cannot be filled by any other substance (Yazici and Gülgün 2016a; 2016b). As the living spaces of people are more and more restricted with the increase in population, ornamental plants have come to the fore as an indispensable resource that keeps people dynamic and connects them to life, both indoors and outdoors. The ornamental plant sector as a whole is trying to expand and strengthen its place in its plant production and trade by using its advantages of cheap labor, climatic characteristics, and regional proximity (Süsbir, 2020). The fact that developed countries have very large production areas, record production values, and the quality of their products make it difficult for developing countries to compete in the ornamental plant sector. In Turkey, on the other hand, significant increases in the number of production areas have occurred in all fields of activity in the ornamental plants sector, exports have increased, products have started to diversify and significant developments have been made in the search for alternative markets.

During the pandemic, economic fluctuations have occurred in the ornamental plants sector, as they have in most facets of life and business. However, as people have grown to seek a bit of nature for their homes, ornamental plants have once again become valuable. Cloistered in their homes, people tend to live a solitary existence instead of having a social life. People who spend time at home and on the balcony are oriented towards indoor ornamental plants, and those who have a garden, outdoor. Campaigns associated with the pandemic in the ornamental plants sector are attracting consumers. Unfortunately, the fact that consumers do not know how to grow plants and are worried about wilting causes them to abstain from buying ornamental plants. In order to prevent this situation, it is necessary to provide information on the guarantee, care, and requirements of the plants. Safe shopping for people and ensuring that their plants will not dry out within 15 days are factors that will increase demand.

REFERENCES

- Ay S., 2009, Süs Bitkileri İhracatı, Sorunları ve Çözüm Önerileri: Yalova Ölçeğinde Bir Araştırma, Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi Y.2009, C.14, S.3 s.423-443.
- Bringslimark T, Hartig T. ve Patil GG., 2009. The psychological benefits of indoor plants: a critical review of the experimental literature. J. Environ. Psychol. 29:422–33.

Gülgün, B., Yazici, K. (2016). Üretimden Pazarlamaya Türkiye De Süs Bitkileri. Türktob, (19), 64-69.

Kelkit A., 2002, Çanakkale Kenti Açık-Yeşil Alanlarda Kullanılan Bitki Materyali Üzerinde Bir Araştırma, Ekoloji Dergisi 11, 43, 17-21.

- Montacchinia, E. Tedescoa S. ve Rondinonea T., 2017. Indoor Environment Quality (User Comfort, Health and Behaviour), Energy Procedia 122 (2017) 289–294
- Sezen, I., Aytatlı B., Ağrılı, R. ve Patan, E., 2017. İç mekân tasarımında bitki kullanımının birey ve mekân üzerine etkileri. ATA Planlama ve Tasarım Dergisi, 1(1): 25-34.
- Süsbir (2020). Süs bitkileri üreticileri altbirliği sektör raporu 2020 (susbir.org.tr)
- Süsbir (2019) Süs bitkileri üreticileri altbirliği sektör raporu 2019 (susbir.org.tr)
- TUIK, 2020. Türkiye İstatistik Kurumu. https://data.tuik.gov.tr/ https://data.tuik.gov.tr/Bulten/Index?p=Bitkisel-Uretim-Istatistikleri-2020-3373
- Ulrich RS., 1981. Natural versus scenes: Some psychophysiological effects. Environ. Behavior, 13: 523-556.
- Ulrich RS., 1991. Psychophysiological indicators of leisue, pp. 73-89. In: B.L. Driver, P.J. Brown, and G. L. Peterson (eds.). Benefits of leisure. Venture Publishing Inc, State College, Pa.
- Ulrich RS. ve Parsons R., 1992. Influences of passive experiences with plants on individual well-being and health, pp. 93-105. In: D. Relf (ed.). The role of horticulture in human well-being and social development. Timber Press, Portland, Ore.
- Ulrich RS. ve Simons RF., 1986. Recovery from stress during exposure to everyday outdoor environments, pp. 115-122. Proc. 17th Annu. Conf. Environ. Design. Res. Assn.
- Url 1: https://www.trthaber.com/haber/ekonomi/pandemide-turkiyenin-cicek-ihracati-artti-559518.html
- Van den Berg, A. ve Custers, M. H. G., 2011. Gardening promotes neuroendocrineand affective restoration from stress. Journal of Health Psychology, 16(1), 3–11.
- Van den Berg, A., Maas, J., Verheij, R. A. ve Groenewegen, P. P., 2010. Green spaceas a buffer between negative life events and health. Social Science & Medicine, 70(8), 1203–1210
- Yazici, K., and Gülgün, B. 2016a, Importance of Lilium Candidum White Lily Growth In Ecological Conditions Of Turkey As A Potential For Landscape And Food Sector In Tokat. Journal of Ecosisystem and Ecology Science, 6(3), 243–250.
- Yazici, K., and Gülgün, B. 2016b, TR83 İllerinde Süs Bitkileri Sektörünün Mevcut Durumu ve Geliştirilmesi Üzerine Bir Araştırma. Selçuk Gıda Tarım Bilimleri Dergisi, 3(1), 18–24.