



Original Article

# Implementation and Effectiveness of Trade Promotion Marketing Techniques in On-Line Market Flowers by Developing the Concept of Label-Sheet

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## Abstract

The paper makes an objective analysis of world flowers market viewed from the perspective of accredited statistical entities finding comprehensive solutions to promote and increase the volume of trade flowers based on the complex interplay marketing management. Another treated issue consists in promoting trade online flowers by implementing a new design concept "label-sheet" pivoting on inserting QR barcode. The new design concept facilitates access to the site of one of the largest producers of flower markets in Romania, SC Comgaby Moln SRL (Magnolia), by simply scanning the QR barcode with a mobile phone. The problem addressed is proving more difficult in presenting the cumulative properties of ornamental flowers with sanogenic proprieties, the beneficiary being informed about the characteristics of the product purchased from multiple points of views. To promote the new ornamental species were made leaflets containing a large volume of data on morphological aspects, requirements for environmental factors, culture technology and so on, thereby improving the marketing of traders to increase revenue the existence of an integrated information system, effective and efficient.

*Keywords:* ornamental plants, sanogenic, barcode, flower market.

## 1. Introduction

In the contemporary society the flowers are a daily presence in human life, whether they consists in public or private moments and spaces. The flowers are considered a vivid expression of prosperity and degree of civilization [8].

In many countries the flower production was become main industrial characteristics, as cut flowers, potted plants or floral arrangements.

International statistics shows, with few exceptions, continued growth of areas and worldwide flower production due to increasing demand for ornamental plants and high incomes that can be derived from this activity. Increase flower production and demand of floricultural products caused a true expansion of international trade in flowers, benefic competition in product quality and high value product market [8].

In addition to improving the assortment of new species, varieties important is knowledge and correlation of environmental factors with the biological requirements of the plants and their growth by correcting different agro-technical works is conditioned by biological traits [9].

The global floral market is one of the most dynamic economic markets nowadays. The statistics data speak for themselves: in 1950 the global market

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for flowers was listed on a turnover of nearly 3 million \$. By 1994 the global floral market rose to 100 million \$ with an annual upward trend of 6% [4]. Analyzing the flower market dynamics between the years 2012-2013 there is a decrease in sales with a fixed set of 190 million euros (downward 10 million compared to 2012) and value traded on-market line of 2.5 million euros [3]. The online flower sales percentage consists in 2.5% of the world market, observing the positive dynamics of this segment with an increase of 30% annually [2]. However, in terms of consumer affinity for certain types of flowers, opinions are divided (fig. 1). The global flower market is subject to constant demands from consumers in the following percentage composition: 46% outdoor ornamental plants, cut flowers 34%, 20% potted flowers [10].

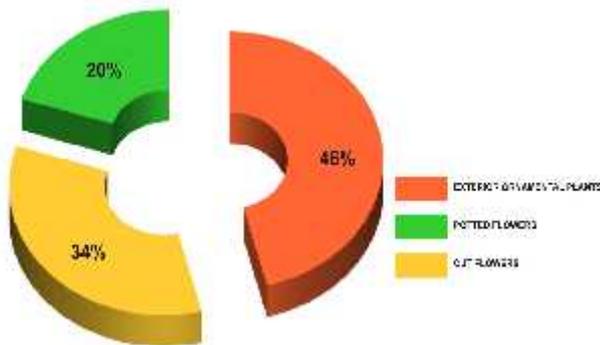


Figure 1. The global flower market (consumer demands) [10]

Regarding the buyers target group for flowers, women are in an overwhelming percentage of 79%, followed by men with 21%. When flowers are acquired, consumer opinion is focused on providing gifts on different occasions putting on secondary focus points the satisfaction of personal needs [7]. On the other hand, 33% of flowers are purchased for satisfying personal needs and 67% as a gift [1].

Another relevant issue that is considered consists in fluctuations of the global flower market, fluctuations that have been associated with various holidays calendar as follows (fig. 2).

Flowers market development in Romania presents positive prospects and dynamics. An economic analysis of ITC (International Trade Centre) statistical affiliate of the World Trade Organization of The United Nations, relate for our country on flowers export an eighteen place from 20 surveyed countries. Economic analysis of exports during 2009-2011 was performed aiming at exports

generated separately by use: cut flowers and potted flowers (table 1).

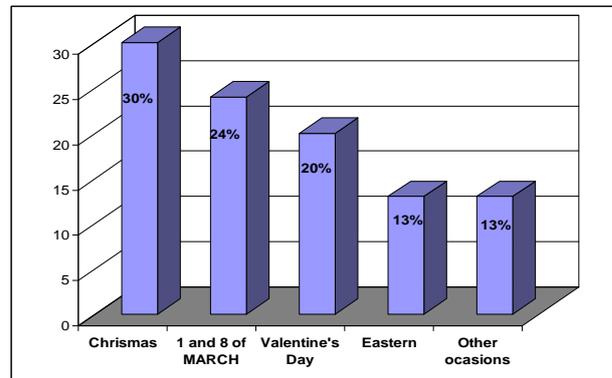


Figure 2. Pairing fluctuations in the world flowers market with different celebrations and special occasions [10]

From table 1 can be observed the dynamics of exports for cut flowers from our country, there is a steady decrease in export values since 2009 (fig. 3).

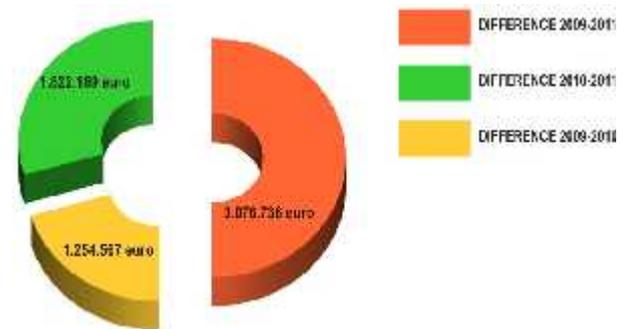


Figure 3. The dynamic of net value obtained in euro for exports of cut flowers from Romania, 2009-2011 (original)

Exported cut flowers trend in our country has a descendant dynamic with a difference of 3 million euros during 2009-2011. Looking at worldwide upward curve export shown in table 1 value, our country is inversely proportional to the general trend imposed.

Dynamics of export of potted flowers in the world has a dynamic upward trend. In our country the export values of potted flowers contains two maximum values in 2009 and 2011, the last year are consisting the reference point of the study to the aggregate value of exports (table 2).

Table 1. Exported income dynamics for 25 countries observed by International Trade Centre, 2009-2010 [11]

Cut flowers/Country	Exported income in euros		
	2011	2010	2009
Germany	910.620.116	926.289.990	871.256.857
U.K.	570.152.124	544.311.418	517.681.940
France	434.542.563	427.449.268	415.868.559
Italy	158.659.277	162.215.746	161.490.845
Russian Federation	147.726.316	111.656.310	99.817.767
Belgium	105.766.328	109.185.296	100.516.291
Switzerland	87.245.666	86.973.992	79.179.763
Poland	82.097.325	84.987.181	74.159.419
Denmark	73.264.448	72.170.579	78.664.960
Austria	70.009.782	71.089.568	70.831.744
Sweden	60.441.753	57.291.546	52.570.131
USA	59.377.496	59.436.849	61.189.888
Czech Republic	54.510.036	51.348.894	43.126.360
Spain	49.431.803	52.355.915	49.073.142
Norway	38.618.587	34.075.179	32.743.386
Ireland	36.330.528	41.284.586	43.257.073
Finland	29.858.140	28.090.373	23.873.828
Romania	24.448.978	26.271.147	27.525.714
Slovakia	21.988.608	15.053.490	10.700.931
Hungary	19.600.715	19.821.678	18.345.130
Greece	18.474.494	20.809.975	22.683.168
Ukraine	14.520.831	12.990.596	11.859.584
Portugal	14.473.520	20.212.133	18.636.702
Litvania	11.417.711	8.802.543	8.803.243
Slovenia	10.227.865	10.293.533	9.546.423
Other countries	100.398.659	96.297.560	87.969.415
Total cut flowers	3.204.203.669	3.150.765.345	2.991.372.263

Table 2. Exported income dynamics of potted flowers for 20 countries observed by International Trade Centre, 2009-2010 [11]

Potted flowers/Country	Exported income in euros		
	2011	2010	2009
Germany	661.914.769	672.774.847	656.497.937
France	247.941.131	243.727.733	229.994.943
UK	173.906.084	159.135.507	161.766.245
Italy	163.326.360	168.665.770	138.269.355
Belgium	121.465.206	128.692.358	111.560.195
Austria	76.237.747	70.893.544	62.247.736
Sweden	68.665.606	53.292.248	45.733.122
Switzerland	66.267.807	60.767.554	56.239.444
Poland	55.038.026	53.435.668	53.447.500
Russian Federation	51.081.877	43.675.841	36.698.002
Spain	48.574.760	50.136.262	51.237.796
Denmark	43.070.302	46.364.957	56.387.867
Czech Republic	35.125.798	32.213.949	27.024.146
Norway	26.199.089	15.868.619	15.451.515
Hungary	23.134.329	24.069.970	21.364.091
Finland	20.951.854	17.768.602	15.152.663
Romania	17.203.256	15.983.481	16.068.407
Portugal	15.772.377	20.611.858	20.971.255
Slovakia	14.187.869	9.510.941	7.829.919
Ukraine	13.784.449	14.332.595	13.187.503
Other countries	94.800.834	91.488.189	91.267.835
Total potted flowers	2.038.649.530	1.993.410.493	1.888.397.476

## 2. Material and Method

Analyzing the data presented above, and given the favorable position that holds our country, a concern of the researchers team from the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Horticultural faculty with SC Comgaby Moln SRL consisting in finding marketing opportunities to increase nationally and internationally sales, that will lead to increase of exports and imports for cut flowers or potted flowers. Thus the main objective was to design and generation of a sheet-label.

These sheets-labels were made at various stages consisting in gathering information about systematic classification related species studied. Collection of written material was made taking into account the general literature. The graphic template of the sheet-label was done using dedicated software, CorelDraw Vector Graphics© with a suggestive graphical form using CMYK color decomposition resulting a suggestive accurate color palette. The information of the sheet-label includes digital information related to a specific QR barecode (Quick Response Code).

This code allows potential users to scan the code with their phone and read all the data provided by the supplier on his website (fig. 4).



**Figure 4.** QR barcode that makes the transition to the flowers vendor website (original)

Transition is basically made on subliminal lever, the buyer being sent to the vendor website where he sees the desired information and other information about other plants. Very often this can have the effect of increasing the expected action for purchasing multiple sales volume of the supplier.

Because today's society is keen on synthesizing information and extracting the main ideas we decided to communicate with the client in

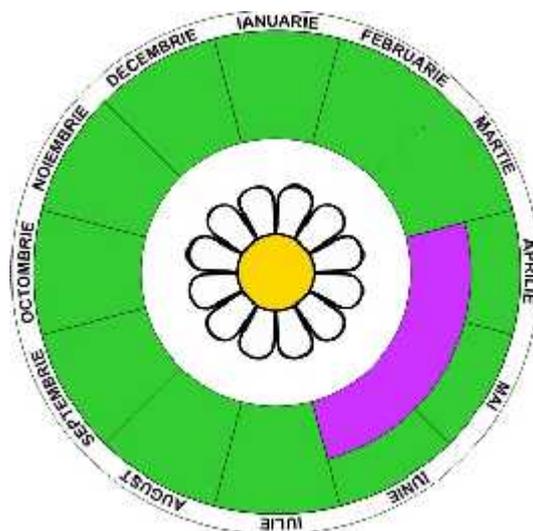
the most primitive form of communication using effective iconography. With a history lost in the mists of time (equestrian house drawings of first human beans), iconography is currently considered the most effective way to communicate with prospective buyers [5].

The maintenance of the plant is treated iconographic (table 3) by the insertion of indicative icons as follows.

**Table 3.** The significance of the designed icons (original)

Icons	Significance of icons
 	sun exposure or shade exposure
	plants who need shade
 	edible or non-edible part plants
	water necessary
	RH% optimum
	pH optimum
	optimum temperature for plant development

Alongside existing iconography in the template of the sheet-label was introduced a seasonal chart specific to each present species. Circular-shaped diagram is divided into 12 equal segments specific for each month of the calendar. Inside the main circle diagram (responsible for the vegetation period of the plant) are inserted central circles with a reduced diameter specific for the blossom period of the plant (fig. 5).



**Figure 5.** Diagram of specific vegetation characteristics for ornamental plants (original)

### 3. Results and Discussions

Creation of the general template for the sheet-label wants to provide advanced solutions for marketing purposes. The two sheet-label templates will enhance the quality of information, providing a constant pull of consumption, avoiding or reducing fluctuations in sales, going on the idea of quality and customer gain loyalty.

Template labels generated in vector graphics professional programs allow export of information in different formats, enabling compatibility with any online medium of information. All items above are embedded in these tags in the form of specific concept models in figure 6 (sheet-label frontispiece) and 7 (sheet-label folding).

**SAN PLANT** **magnolia**

**MEDINILLA Lindl.**  
Fam. MELASTOMATACEAE  
Denumirea populară: Strugurele roșu

**Medinilla magnifica**  
**Origine:** Insulele din Oceanul Pacific, Sudul Asiei, Africa și Madagascar.  
**Morfologie:** plantă bine ramificată, înaltă de 60-120 cm, tulpini tetraunghiulare cu peri mari și aspri la noduri, ca niște aripioare.  
Frunzele ovale, opuse, lungi de 20-30 cm, de culoare verde-închis, lucioase, cu 3 nervuri evidente.  
Florile dispuse în panicule pendule lungi de circa 40 cm, roz-pal, cerșoare cu numeroase bractee mari colorate alb, roz.  
Înflorirea are loc în aprilie-iunie.

**Cerințe ecologice**  
Temperatura optimă de creștere 18-25°C. Iarna planta trebuie ținută într-o încăpere unde temperatura să nu scadă sub 13°C, dar nici să depășească 17°C. Nu suportă curenții de aer rece și schimbările bruște de temperatură.  
Necesită locuri bine luminate, evitându-se contactul direct cu razele soarelui.  
Pământul se va menține în permanență reavăn. Umiditatea aerului aproximativ 70%.  
Amestecul de pământ: pământ de ericacee 2/4, nisip 1/4 și mranită 1/4.

**Particularități tehnologice**  
Înmulțirea se va efectua primăvara folosind butași de vârf, menținuți la 25-28°C, umiditate atmosferică peste 90%.  
Pe timpul verii se udă de două ori pe săptămână, în schimb pe timpul iernii udările se vor reduce, udându-se doar când se usucă pământul la suprafață. Vara se vor efectua pulverizări zilnice fine cu apă pe frunze. Nu se va folosi pentru udat apa caldă.  
Fertilizarea se va efectua de două ori pe luna din aprilie până în septembrie, iar în restul anului se va fertiliza cu cantități mai reduse o dată la 2 luni.  
Transplantarea se va efectua o dată la doi ani, în luna februarie-martie.  
După înflorire, tăiați la jumătate tulpinile care au purtat florile și reduceți udările.  
Planta este foarte rar atacată de paiajenul roșu.

**Utilizare**  
Medinilla decorează atât prin ciorchini de flori cât și prin frunzele mari și lucioase, fiind folosită astfel pentru decorarea interioarelor. Beneficiile sanogenne fac referință la purificarea aerului, îmbunătățirea stării de confort, liniștea, absorb radiatiile electromagnetice.

perioada de vegetație  
perioada de înflorire

Qr section

<http://www.magnolia.ro/>

Figure 6. Graphical concept of frontispiece sheet-label (original)

**CROSSANDRA**  
Fam. ACANTHACEAE  
Crosandra

**SAN PLANT**  
PN-II-IN-CI-2013-1-0011

**Cerințe ecologice:**  
Crosandra este capabilă să înflorească în numai câteva luni de la producerea ei. Înflorirea se poate realiza în orice anotimp și este de lungă durată (până 3 luni). Are nevoie de căldură (18-20°C) pentru o bună creștere și înflorire, temperatura mai puțin de 15°C îi place lumina multă, dar fără soare direct, vânt. Se cultivează regulat și abundent: scutit de cîmpenit și de permanentă rezidui. În septembrie-octombrie se reduce puțin uoarea pentru a se asigura o perioadă de semirepaus înainte de înflorirea din toamnă. Pulverizarea cu apă și săruri se face frecvent. Substanța toxică săi conține tartră, formosol și admăni de înțeze elăsură de alte componente, ar trebui să fie acid (5,5-6).

**Înmulțire:**  
Metoda cea mai simplă de înmulțire este sădășirea. Butași de vîr de lăstari, 3-4 noduri, se fac primăvara sau vara. Înălțarea lor este favorizată de căldură (18-20°C) și aplicarea substanțelor rizogene (Rizosol, Belolan, Radolin). De asemenea se înmulțesc și prin seminte primăvara.

**Lucrările de îngrijire constantă:**  
Plantele tinere se culesc pentru a se induce o mai bună înflorire. Fertilizarea se aplică în 3-4 etape în perioada de creștere. Îngrășămintele complexe folosite trebuie să fie ușor solubile și în concentrație redusă (0,05-0,1%), aplicate zilnic.

**Utilizare:**  
Este apreciată ca plantă de ghiveci pentru florile care conțin în partea atractivă

**Morfologie**  
Frunzele elipsoidale și au forme ovale-rotundate, vîrful ascuțit, marginea ondulată și culoarea verde închis, lucie pe fața superioară, iar reversul verde mai deschis. Inflorescența spiraliformă, de circa 10 cm lungime din 4-6 noduri de frunzele vechi acoperite cu perlungi, albi, mîlășași. La subscara de la baza apar florile tubulare ce se deschid într-o trompetă largă cu 6 lobi colorate în roșu-oraș foarte viu, roz-salmon.

pentru perioada de vegetație  
pentru perioada de înflorire

Figure 7. Graphical concept of folding sheet-label (original)

#### 4. Conclusions

For Romania, the main problem related to the culture and trade of flowers will be in alignment with the external quality standards, recover old markets and entering new ones by diversifying assortment, upgrading, use of valuable plant material. Floriculture development will need to be accompanied by advertising, consumer education, which will lead to increased demand for flowers (cut, potted plants, plants for landscapes).

Therefore, the solutions presented in this paper, sheet-label concept and online trade will increase the competitiveness of Romanian floricultural sector in terms of diversifying product range, increasing production and output quality.

Extending events to promote knowledge of floriculture products, development of national brands and diversification of technological transfer through leaflets, brochures, magazines, online sites etc. are just a few modalities for marketing improvement of the flower sector.

This promotion requires covering all consumer requirements consistent with the increased demands on the commercial quality and way of product presentation.

Upgrading capitalization flowers in the market economy it is related to the existence of an integrated information system, effective and efficient. A further issue will be keen on informing producers about the newest crop technologies and their immediate application.

The template sheet contains the information useful to buyers as high-tech floriculture requires the development of new marketing techniques. Quality is often more important than the quantity.

Results obtained will lead to increase its production quality by tracking the main production - network marketing - consumer because the future depends on how floriculture will provide constant: quantity, quality, and continuity of production and enhancement of production by developing monitoring systems, management and marketing activities.

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