INSIGHTS INTO THE
INTERNATIONAL FLOWER TRADE

Sylvie Mamias, Secretary General
UNION FLEURS – International Flower Trade Association
Union Fleurs is the international umbrella organization representing and promoting the interests of national associations and companies active in the floricultural trade: wholesale, import, export, distribution (cut flowers, foliage and pot plants).

Founded in 1959, it is based in Brussels and has nowadays members in 20 countries worldwide (in Europe, Africa, Middle-East, South and North America, and Asia).

Within its membership, Union Fleurs gathers over 3,000 companies active in the trade of cut flowers and pot plants worldwide. Members account for more than 80% of the total value of the worldwide trade of cut flowers and pot plants.

www.unionfleurs.org
UNION FLEURS
A members-driven organisation

- Members in 20 countries worldwide
- Major market players represented – the Netherlands, Colombia, Ecuador, Kenya, Ethiopia, Germany, Italy, etc...
- National associations of flower wholesalers & traders (export, import, wholesale, distribution)
- Individual companies
- More than 3000 companies represented within the membership, accounting for over 80% of the total value of worldwide trade of floriculture products
Union Fleurs Membership

ITALY

BELGIUM

AUSTRIA

DENMARK

GERMANY

JAPAN

KENYA

USA

ETHIOPIA

THE NETHERLANDS

ECUADOR

KENYA

AFIF AMERICA'S FLOWER CONNECTION

KENYA FLOWER COUNCIL

FRANCE

FLORADANIA

THE NETHERLANDS

THE NETHERLANDS

MOROCCO

UGANDA

COLOMBIA

FLORADANIA

CHILE

FRANCE

AFIF AMERICA'S FLOWER CONNECTION

KENYA FLOWER COUNCIL

FRANCE
KEY CHARACTERISTICS & DYNAMICS OF THE GLOBAL FLOWER INDUSTRY:

Overview – production of cut flowers:

Largest production areas:
- China
- India
- Thailand
- South Africa

Source: ITC Trade map 2022 | Union Fleurs –AIPH Statistical Yearbook 2022
Overview – imports of cut flowers:

Top importing countries:
- Germany
- Netherlands
- USA
- United Kingdom

Source: ITC Trade map 2022 | Union Fleurs –AIPH Statistical Yearbook 2022
Overview – exports of cut flowers:

Top exporting countries:
- Netherlands
- Colombia
- Ecuador
- Kenya
- Ethiopia

Source: ITC Trade map 2022 | Union Fleurs –AIPH Statistical Yearbook 2022
Major intensification and globalisation of production & trade of cut flowers since 1990s

**Figure 1:** World trade in cut flowers & foliage, 1988-2004 (US$m)

- **World trade in cut flowers:**
  - 1990: 1 billion €
  - 2015: 15 billion €

*Source: International Trade Centre (ITC) COMTRADE*
Global trade & routes to destination markets:

TOTAL VALUE OF FLOWER TRADE WORLDWIDE:
20-25 BILLION EUR PER ANNUM

Sources: UN-Comtrade, Royal FloraHolland, Rabobank, 2016
Key suppliers to the global flower market:

Netherlands (43% of the global market):
- International trade center (global hub) through the Dutch flower auctions systems since 1950s
- More than 40% of the world trade transists / is re-exported via the Netherlands

4 key developing countries (44% of the global market together): Colombia, Ecuador, Kenya and Ethiopia
- In 10 years (2005 to 2015) they have together overcome the position of the Netherlands
- Export to more than 50 destinations in the world
- Regional powerhouses: Kenya and Ethiopia key suppliers to the European market, Colombia and Ecuador key suppliers to the US market

Sources: UN-Comtrade, Royal FloraHolland, Rabobank
Socio-economic contribution of the flower industry in key supplying developing countries:

FRESH FLOWERS, BLOOMING BUSINESS
Source: Kenya Flower Council

- It is estimated that over 4,000,000 Kenyans depend on the floriculture industry and 200,000 of whom are flower farm employees, 70% of whom are women.
- Kenya’s floriculture industry exported 210,000 tons in 2021 valued at 850 million euros.
- The agriculture sector contributes 25.3% of Kenya’s GDP, with the flower industry accounting for 1.3% of the national economy.
Key destination countries:

World's largest cut flower import countries, 2015 vs. 2020

- **Flower expenditures are still very concentrated in a limited number of destination markets** → room for diversification

Sources: UN-Comtrade, Royal FloraHolland, Rabobank

Estimated development of consumption value:

Source: Rabobank (estimates)
Specificities of the international flower supply chain:

- **Product characteristics:**
  - Highly *perishable* products with a short life-cycle
  - Wide *assortment* of flower and plant varieties & species
  - *All-year-round:* high demand and supply uncertainties in terms of product quantity, quality, origin and timing (influence of seasons, environmental and production conditions, market trends)

- **Peak seasons:** Springtime, Valentine’s day (14 February), Mothers’ day (March-May), International Women’s Day (8 March)
  - Huge volumes must reach destination markets on time
  - Extreme pressure on the supply-chain and logistics during a few days of the year

- **Smooth, speedy & efficient logistics and processes** are essential along the supply chain, from origin to destination, to ensure freshness, on-time deliveries and secure growth and competitiveness

- **Cold-chain integrity and temperature management** are crucial to preserve the quality of flowers during transport and ensure vase-life at destination
The Flower Supply Chain: from blooms to bouquets

A very globalised, integrated and complex supply chain worldwide

“A premium on speed”: 24 – 48 hours
FLOWER VARIETIES & QUALITY STANDARDS:

Top exported flower varieties globally:
- Rose
- Chrysanthemum
- Carnation
- Orchids
- Lily
FLOWER VARIETIES & QUALITY STANDARDS:

• UNECE QUALITY STANDARDS (1980/1994):

<table>
<thead>
<tr>
<th>Product</th>
<th>No.</th>
<th>Published / Last revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut flowers</td>
<td>H-1</td>
<td>1980/1994</td>
</tr>
<tr>
<td>Fresh cut unifloral roses</td>
<td>H-3</td>
<td>1980/1994</td>
</tr>
<tr>
<td>Cut unifloral carnations</td>
<td>H-4</td>
<td>1980/1994</td>
</tr>
<tr>
<td>Multi-floral carnations</td>
<td>H-5</td>
<td>1982/1994</td>
</tr>
<tr>
<td>Chrysanthemums</td>
<td>H-6</td>
<td>1982/1994</td>
</tr>
<tr>
<td>Gladioli</td>
<td>H-7</td>
<td>1982/1994</td>
</tr>
<tr>
<td>Strelitzias</td>
<td>H-8</td>
<td>1982/1994</td>
</tr>
</tbody>
</table>

Observations:

- Limited awareness by operators of the existence of these standards
- Evolution of trade & trends since the 1990s: some varieties (gladioli, strelitzias, mimosa, carnations) are less relevant in global trade, other varieties have emerged (orchids, lilies)
- The flower industry has built on them and further developed industry standards to cover a larger number of varieties since 1990s and more detailed product specifications
FLOWER VARIETIES & QUALITY STANDARDS:

• INDUSTRY PRODUCT SPECIFICATIONS (NL/EU):
  
  The product specifications of the VBN (Association of Flower Auctions in The Netherlands) set out the basic agreements between growers and traders for the trading of horticultural products. These agreements are kept up-to-date, accessible and available. Therefore, we regularly consult with growers and customers, and with employees of Royal FloraHolland, Rhein Maas and Plantion.

  • Product specifications for 52 flower varieties
  • Include:
    • Internal quality
    • External quality
    • Maturity (stages of opening)
    • Grading
    • Packing
  • Regularly updated in consultation with growers & buyers

https://www.vbn.nl/en/search-mechanism/
**Product Specification**

**Product group code:** 10103500  
**Gypsophila**  
**May 2024**

**Minimum Requirements for Trade**

**Internal Quality**

**Pre-treatment Specific**

Gypsophila supplied in containers must be pretreated and supplied in water with a pre-treatment product. At least one of the pre-treatment agents with the following codex must be on the label:
- code 11, minimum concentration in the delivery solution is 0.6 ppm;
- code 20, minimum concentration in the delivery solution is 0.8 ppm;
- code 21, minimum concentration in the delivery solution is 0.8 ppm.

The cultivar 'My Pink' is an exception to the requirement for pre-treatment. Here a pre-treatment agent with the active ingredient sodium dichloroisocyanurate (code 11 on the product's label) applies. Passage 1 minute tablet per 3 liters, according to the label instructions for use on the label.

**External Quality**

**Maturity Specific**

Minimum maturity requirement

---

**Quality and Grading Criteria**

**Quality Criteria per Batch**

The following supplementary requirements apply:
- Gerbera must be free of growth defects. Including breaks in growth, irregularly formed hearts and irregularly formed flowers;
- Gerbera must be free of defects;
- The lot must be free of limp flowers.

The tolerances named in Overview 1 in the general regulations for Cut flowers apply.

**Grading Criteria per Batch Specific**

The Gerbera should be graded according to:
- Stem length, graded in classes of 5 cm. In departure from the general regulations for Cut flowers, no maximum length difference applies to those supplied in boxes;
- Flower diameter, where:
  - the diameter is measured along the widest side of a flat flower. In other words, a measuring rule is laid on the flower and the flower is pressed flat. The values arrived at are rounded down to the applicable grading value, in accordance with the overview;
  - the diameter of the smallest flower, rounded down, is declared.

**Grading of flower diameter**

<table>
<thead>
<tr>
<th>Minimum flower diameter (in cm)</th>
<th>Grading code S20</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>004</td>
</tr>
<tr>
<td>5</td>
<td>005</td>
</tr>
<tr>
<td>6</td>
<td>006</td>
</tr>
<tr>
<td>7</td>
<td>007</td>
</tr>
<tr>
<td>8</td>
<td>008</td>
</tr>
<tr>
<td>9</td>
<td>009</td>
</tr>
<tr>
<td>10</td>
<td>010</td>
</tr>
<tr>
<td>11,5</td>
<td>011</td>
</tr>
</tbody>
</table>

**Grading Codes Specific**

Grading codes overview

<table>
<thead>
<tr>
<th>Product group no.</th>
<th>Name</th>
<th>GC 1</th>
<th>GC 2</th>
<th>GC 3</th>
<th>GC 4</th>
<th>GC 5</th>
<th>GC 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01.006.01</td>
<td>Gerbera large flowered</td>
<td>S20</td>
<td>S21</td>
<td>S22</td>
<td>S23</td>
<td>S24</td>
<td>L11</td>
</tr>
<tr>
<td>1.01.006.02</td>
<td>Gerbera mini</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.01.006.03</td>
<td>Gerbera mini double</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.01.006.04</td>
<td>Gerbera large flowered orange</td>
<td>S20</td>
<td>S21</td>
<td>S22</td>
<td>S23</td>
<td>S24</td>
<td>L11</td>
</tr>
<tr>
<td>1.01.006.11</td>
<td>Gerbera large flowered cur shaped</td>
<td>S20</td>
<td>S21</td>
<td>S22</td>
<td>S23</td>
<td>S24</td>
<td>L11</td>
</tr>
<tr>
<td>1.01.006.12</td>
<td>Gerbera mini var shaped</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.01.006.06</td>
<td>Gerbera large flowered scented shaped</td>
<td>S20</td>
<td>S21</td>
<td>S22</td>
<td>S23</td>
<td>S24</td>
<td>L11</td>
</tr>
<tr>
<td>1.01.006.07</td>
<td>Gerbera mini scented shaped</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.01.006.08</td>
<td>Gerbera mini spider shaped</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.01.006.09</td>
<td>Gerbera nano</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

S20 = Minimum stem length  
S23 = Minimum flower diameter  
S05 = Maturity stage  
L11 = Number of stems per bunch

---

**Example for Stages of opening**

**Alstroemeria (grp 10100300)**

1.  
2.  
3.  
4.  
5.  

Maturity sorting
FLOWER VARIETIES & QUALITY STANDARDS:

- CONTRACTUAL SPECIFICATIONS IN MASS – MARKET RETAIL:

  - Might refer to UNECE flower quality standards as a basis
  - Usually: additional contractual quality specifications agreed between buyer and seller on a case-by-case basis

Quality Requirements Flowers and Ornamental Plants

With respect to production and products, the Supplier must observe the following general Buyer’s requirements for Suppliers and products. The Supplier is responsible for ensuring that the products and the production and placement on the market meet the requirements European Union/European Economic Area and Finnish legislation. The Supplier is liable for the performances of the supply chain and all of its subsuppliers and for the compliance of such performances with this agreement as for its own performance.

At the Buyer’s request, the Supplier must provide the Buyer’s representative with any information reasonably required by such representative on the Buyer’s product due to this agreement. Unless otherwise agreed, the Supplier is responsible for all environmental and quality registrations and registrations of origin as well as other corresponding registration and notification procedures with the authorities and other relevant parties.

The Suppliers must ensure the safety of their products and compliance with the requirements of European Union/the European Economic Area and Finnish legislation. The Supplier is responsible for the performance of all its subcontractors as for its own performance.

The quality of the flowers and ornamental plants must be in compliance with the Buyer’s requirements. The Suppliers must ensure that the products are inspected according to IPPC (International Plant Protection Convention) standards. The Suppliers must ensure that the plants and harmful pests in directive (2000/29/EY) are controlled in the country of origin. The plant health certificates or plant passports are attached to the shipment when applicable. The Suppliers must ensure that the quality of the cut flowers is in compliance with UNECE standards [http://www.unece.org/trade/agr/stand/flovers/flower_e.html](http://www.unece.org/trade/agr/stand/flovers/flower_e.html)

The GAP principles (Good Agricultural Practice, GLOBALGAP, More Profitable Sustainability (MPS-GAP), the Finnish [Laatuturvaohjeistus guidelines], the IP principles (Integrated Production) or other similar principles must be observed in the cultivation and production of flowers and ornamentals.

At the Buyer’s request, the Supplier must deliver documentation relating to product safety and quality assurance.
## OVERVIEW:

<table>
<thead>
<tr>
<th>HS NOMENCLATURE</th>
<th>RELEVANT VARIETIES IN INTERNATIONAL TRADE</th>
<th>UNECE QUALITY STANDARDS 1980/1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>0603 11 00</td>
<td>ROSES</td>
<td>H3</td>
</tr>
<tr>
<td>0603 12 00</td>
<td>CARNATIONS</td>
<td>H4 (unifloral) and H5 (multi-floral)</td>
</tr>
<tr>
<td>0603 13 00</td>
<td>ORCHIDS</td>
<td>None</td>
</tr>
<tr>
<td>0603 14 00</td>
<td>CHrysanthemums</td>
<td>H6</td>
</tr>
<tr>
<td>0603 15 00</td>
<td>LILIES (Lilium spp.)</td>
<td>None</td>
</tr>
<tr>
<td>0603 19 00</td>
<td>OTHER FRESH FLOWERS</td>
<td>H1 CUT FLOWERS ( &amp; Annex Mimosa)</td>
</tr>
<tr>
<td>0603 90 00</td>
<td>FLOWERS OTHER THAN FRESH</td>
<td>None</td>
</tr>
<tr>
<td>EU CN code: 0603 19 10</td>
<td></td>
<td>H7 GLADIOLI</td>
</tr>
<tr>
<td>EU CN code: 0603 19 20</td>
<td></td>
<td>Ranunculi</td>
</tr>
<tr>
<td>0603 90 00</td>
<td>FLOWERS OTHER THAN FRESH</td>
<td>None</td>
</tr>
<tr>
<td>0604 20</td>
<td>FRESH FOLIAGE</td>
<td>H2 CUT FOLIAGE</td>
</tr>
</tbody>
</table>
Thanks for your attention!

www.unionfleurs.org

info@unionfleurs.org

https://www.linkedin.com/company/unionfleurs-international-flower-trade-association