# KIE

### Biostimulants from nature for agriculture and gardening

For higher and better yield for healthier and stronger plants



# KF PURE PROFIT

for the soil and roots

for the garden and the environment

for the gardener and the farmer

for the land and the crops

for all!

Original Israeli innovation	p. 5
<b>KF-10</b> Multi-purpose nourishment for soil and plants	pp. 8-9
KF-20 Nourishment concentrate for leaves and roots	pp. 10-11
KF-30 Organic garden fertilizer	pp. 12-13
KF-SERFICO Powerful biostimulant for development and strengthening of root systems, and improvement of foliar nourishment	pp. 14-15
<b>KF-AMINO</b> Enhancement of fruit color and size	pp. 16-17
KF-OLIVE Biostimulant for improving olive tree nourishment	pp. 18-19
Instructions for use	pp. 20-22





## Biostimulants from nature; an original Israeli innovation

VGI Israel is a pioneer in the development and production of biostimulant nourishment preparations designed to enhance the soil food web and plant nutrition. The company's products are designed for use in all types of plant agriculture, as well as home and public gardening and lawn treatment.

The KF series of products, an original Israeli development, reflects knowledge and experience that VGI has acquired over the last 30 years, working with professional growers and research institutions in Israel and worldwide. The products have been tested and proven effective in a long series of experiments and observations.

#### Pure profit

Our products are all made from natural ingredients only, and work in different ways in order to improve and strengthen the development processes of root systems, growth and blossoming of the fruits and vegetables. Optimal use of the products will ensure bountiful harvests of high-quality produce over time.

#### For farmers

Incorporating the products in fertilization programs will greatly assist in improving the harvest and quality of the fruit.

#### For gardeners

Use of the products helps in maintaining greenery and blossoming throughout the year, with significant reduction of all other forms of fertilization, and greater cost savings.

#### For the environment, soil and plants

The products are non-toxic to humans, animals and the environment. Their activity assists in preserving the richness and stability of the growth environment. The products act to enrich the living substances in the soil, promote rejuvenation and strengthening of root, plant and fruit tissue, and improve plant resistance to stress.

#### KF - pure profit for all

Farmers and gardeners using biostimulants of the KF Series testify that after a period of working with the materials, they have achieved higher, better quality yield, and stronger, healthier and better looking plants. Thus, the bottom line is that everyone profits more.

The products come packaged as liquid, ready for use. The company's activity is ISO 9001 certified.





#### The "embryo nutrition" method

The cycle of creating the next year's harvest begins when the farmer completes the current year's harvest. At that time, tree cells are in the primordia state, before becoming reproductive organs and fruit. This stage is characterized by accelerated cell divisions.



At this stage it is vital to feed these cells to obtain strong plants and a high-quality harvest. Nutrition at the embryo stage, at which vigorous cell division takes place, will accelerate the natural process, considerably improve development of plants and fruits

and have a positive effect on creating solid, high-quality fruit.

Embryo nutrition is based on proper supply of both macro and micro elements, thus maintaining a stable and vital population of microorganisms in the soil. The nutrition consists of various substances: Plant extracts, enzymes and amino acids from plant sources, fulvic acids, and various vitamins and minerals from plant sources. A precise mixture of vital ingredients, creating an ideal environment for the plants to thrive in.

All KF preparations are non-toxic to humans, animals and plants, and do not cause rashes. The preparations are authorized by the Ministry of Agriculture for use in agriculture and gardening in Israel; made entirely from natural materials with no chemicals added.

KF-30 ,KF-20 ,KF-10 are compliant with all organic agriculture standards.



KF preparations - just what plants need



Approved for organic agriculture License No. 7043 Approved in accordance with the National Organic Program (NOP) License No. 11,008

Not harmful to bees and fish Non-toxic, non-synthetic





### Multi-purpose liquid biostimulant for soil and plant nourishment

KF-10 is a preparation designed to improve growth of plants and increase soil fertility. Correct use of the preparation according to the principles of the embryo nutrition method has proven effective in increasing harvests and improving quality of produce in a wide range of crops.

**Multi-purpose:** KF-10, applied either by spraying or through the irrigation system, is designed to create a Nutrition interface ideally suited to plants' needs, and prevent over-fertilization with minerals and salts. The preparation consists of many different natural ingredients: Seaweed concentrates, proteins, vitamins, vegetable oils, minerals, salts, sugars and plant extracts, all combined in a unique formula.

- Works on the metabolic mechanisms of plant and root tissue, as well as microorganisms in the soil.
- Improves plants' ability to absorb minerals and transport them within the tissue, enhances plant cell metabolism, and increases ability to withstand conditions of stress, heat and dryness.
- Suitable for use in a wide range of crops: Vegetables, spices, field crops, vineyards, deciduous fruit orchards, sub-tropicals, olives, almonds, citrus, dates, flowers, and more.
- Also suitable for gardening: Grass, garden and indoor plants, and more.
- Approved for organic agriculture in Israel; compliant with NOP standards.

The preparation has been in use since the 1990s, and has since proven itself effective in improving plant growth processes, increasing the maturation, production, amounts of solids and sugar levels of fruits, increasing the resistance of plants to heat and cold stress, and improving their resistance to disease and pests.

**General instructions for use:** See page 20 Read the label carefully before using Shake before use



Sold in 5 liter containers





Approved for organic agriculture, License No. 7115 Approved in accordance with the National Organic Program (NOP) License No. 11,007 Not harmful to bees and fish Non-toxic, non-synthetic





# Multi-purpose concentrated liquid biostimulant for soil and plant nourishment

KF-20 is similar in its properties and ingredients to KF-10, but far more concentrated.

**Multi-purpose:** the preparation is applied either by spraying or through irrigation systems, and is designed to create a nutrition interface ideally suited to plants' needs, and prevent over-fertilization with minerals and salts.

The preparation consists of many different natural ingredients: Seaweed concentrates, proteins, vitamins, vegetable oils, minerals, salts, sugars and plant extracts, all combined in a unique formula. The preparation works on the metabolic mechanisms of cells in the plant and root tissue, as well as microorganism populations in the soil. It improves plants' ability to absorb minerals and transport them within the tissue, increase sugar accumulation, and resistance to heat and dryness stress conditions.

#### Concentrated KF-20

The concentrated preparation has all of the good properties of the more diluted substance. KF-20 is suitable for use as a base for fertilization mixtures, it combines micro and macro elements together with a powerful natural biostimulant. The preparation is authorized for use in organic agriculture in Israel, in compliance with Israeli Organic law regulations and NOP standards.

KF-20 is sold in Israel in 250 ml and 1 liter containers especially for the specialized gardening market, as well as for lawn growing and hydroponics.

**General instructions for use:** See page 21 Read the label carefully before using Shake before use



Sold in 250 ml and 1 liter containers







Approved for organic agriculture License No. 7116 Approved in accordance with the National Organic Program (NOP) License No. 11,009

Not harmful to bees and fish Non-toxic, non-synthetic





#### Multi-purpose biostimulant for soil and plant nourishment in gardens

A well-known, popular nutrition preparation. The ultimate choice for anyone wishing to cultivate a flourishing garden throughout the year using preparations friendly to the environment and to humans.

- Especially suited for use in home gardens through drip irrigation, sprinkler irrigation or spraying and percolation treatment.
- · Assists in maintaining the vitality, greenness and flourishing of gardens and lawns.
- Improves growth and greatly contributes to the vitality and flourishing appearance of home gardens.
- Increases the absorption of minerals from the soil, and plants' ability to utilize them.
- Contains vegetable oils that assist in reinvigorating deciduous trees after winter dormancy, and vitamins that increase cell division activity.
- Contains available sugars, enzymes and proteins from natural sources, vital for the development of microorganism populations (helpful bacteria) in soils and cultivation beds.

KF-30 contains seaweed extract and various herbal concentrates. These ingredients act on plant roots during germination or spring rejuvenation and assist in the development of strong, vital roots. Later on, these same ingredients enable vigorous plant growth and strong blossoming, resulting in strong, resilient plants. Consistent, continuous use of the preparation has been proven to give plants high resistance to stress situations, diseases and pests.

#### One liter of KF-30 is enough for a 25 liter fertilization tank.

**General instructions for use:** See page 21 Read the label carefully before using Shake before use



Sold in 250 ml, 1 liter and 5 liter containers





# KF-AMINO

Biostimulant based on amino acids to encourage growth, coloring and sugar accumulation in the fruit

Amino acids preparation from a unique source, an original innovation by VGI Israel. Fertilizing plants with amino acid concentrates is known to have the positive effects of improving fruit formation, vegetative reproduction, accumulating assimilates and ripening.

- Made up of a unique combination of plant-based amino acids concentrate and saponins.
- High content of amino acids and peptides with low molecular weight, with easy absorption properties in plant tissue.
- The saponins in the preparation act as a natural stimulant for the development of plant cells, as well as a strong, effective surface material.
- Designated for use as foliar spray for field crops, orchards and vegetables, as well as through drip and sprinkler irrigation systems.

Amino acids are known to have a positive effect on breathing mechanisms and absorption of assimilates in plants. The preparation thus assists in improving reproduction, accumulation of assimilates, ripening processes, and accumulation of sugars and color in fruit.

**General instructions for use:** See page 22 Read the label carefully before using Shake before use



Sold in 250ml, 1 liter and 5 liter containers







# KF-SERFICO

Seaweed based biostimulant for encouraging root zone activity and improving foliar nourishment

Original preparation designed to hasten enrooting and reproduction processes and improve foliar absorption of nutritional substances.

KF-SERFICO contains seaweed extract, rich in protein and minerals, combined with natural saponin extract from desert plants. The seaweed extract constitutes a provider of micro and macro nutrients, as well as various substances acting as reproductive stimulants. The desert plant extract is known to have a positive effect, acting as a biological accelerant of enrooting and reproduction processes, a positive effect on micro fauna populations in the earth (including rejection of harmful nematodes) and effective activity as a surface that assists penetration of substances into plant tissue.

Applying the preparation through the irrigation system towards planting will assist in the crop's entrenchment and improve enrooting. In foliar spraying, this preparation constitutes an effective and important addition to all mineral nourishment preparations, as well as to the KF-AMINO preparation. SERFICO will assist in absorption of minerals through the plants' foliage, with no need for additional substances from other areas.

This preparation is non-toxic, easy to use, does not cause irritation or create a deposit.

**General instructions for use:** See page 22 Read the label carefully before using Shake before use



Sold in 250 ml, 1 liter and 5 liter containers



# KF-OLIVE

Designated nourishment preparation for treatment of olive trees in the process of enrooting, prior to blooming, forming of unripe fruit and preparation for picking. Also suitable for gardening.

Original innovation based on some of the KF-10 prepartion's ingredients. Preparation specifically designed for treating olive trees throughout all stages of fruit development, and for combining with growth substances and oils applied by foliar spraying to weaken the sting before the olive harvest.

KF-OLIVE has been tested and tried successfully in the interface of weakening the sting before the olive harvest, according to the trunk-shaking method. It has been found that replacing mineral fertilizer with KF-OLIVE in the substance mixture has resulted in a significant decrease in the falling of leaves during harvest, with no increase in fruit remaining on the trees.

The preparation is also suited for application to the root zone through the irrigation system and/or percolation treatment. Use of the preparation immediately after the harvest, as well as in the early stages of development of the olive fruit, will contribute to the tree's vitality, high yield and reduce intermittence of yielding.

KF-OLIVE is non-toxic, does not produce deposits and is not an irritant. The preparation comes as a liquid, soluble and easy to use.

**General instructions for use:** See page 22 Read the label carefully before using Shake before use





Sold in 1 liter and 5 liter containers

#### General instructions for use:

For detailed instructions on each crop, contact us at:

Professional Director: Hagai Raban +972-53-6539003

Gardening and sales consulting: Yankale Sefian +972-54-4303449

Sales: **Solodar Natiya** +972-50-7626151

Marketing and Customer Relations Manager: Avital Raban +972-50-4549091

For further information visit our website at: www.vgi.co.il

#### **KF-10**

#### For leafy green vegetables and root vegetables:

Spray in dosage of 5-10 liters per hectare every 21 days, from third real leaf to harvest.

#### For tomatoes, peppers and eggplant in open fields and greenhouses:

10 liters per hectare through the irrigation system, every 21-30 days.

#### Watermellon, mellon:

Two treatments 7.5 liters per hectare through the irrigation system 7 days after fruit set, every 21 days. In selective picking, repeat treatment after every harvest.

#### For deciduous fruit trees, vineyards:

10 liters per hectare after completing the harvest; 10 liters per hectare from awakening; 10 liters per hectare every 21 days from formation of fruit until starting to ripen. All treatments are administered through the irrigation system; for detailed recommendations on spraying treatments, contact our representatives.

#### Sub-tropical fruit trees:

10 liters per hectare after completing the harvest; 10 liters per hectare every 21 days from maturing until starting to ripen.

All treatments are administered through the irrigation system; for detailed recommendations on spraying treatments, contact our representatives.

#### Lawns:

Initial infusion treatment by spraying 1-2 liters per 1000 sq/m, followed by spraying 0.5-1.0 liters per 1000 sq/m every 10 days. Before use, consult the VGI lawn consultant.

#### For treatment with home fertilization systems and hydroponics systems:

Add 100 ml of KF-20 to a 20 liter container of water. Adjust the fertilization pump to relative dosage of 0.2-0.5%. Fertilization should be operated with each watering.

#### Infusion treatment:

Add 150 ml of KF-20 to 5 liters of water; the whole quantity may be infused in one irrigation, or over 2-3 days.

#### For spraying:

Make sure the sprayer is clean of any leftover pesticide or fertilizer. Add 100 ml of KF-20 to 10 liters of water; spray the foliage, stem and base of the plant until flow off occurs.

#### For percolation treatment (with a funnel):

Add 10 ml of KF-20 to 1 liter of water (ratio 1:100); irrigate the foliage and around the root base. Repeat this action on a weekly or bi-weekly basis.

#### KF-30

#### Through the irrigation system (drip, mini-sprinklers, sprinklers)

Add 1-5 liters of KF-30 to a 20-25 liter container connected to a fertilization pump; fill with water. Set the fertilization pump to the regular dosage of 0.2-0.5%. Turn the pump on at each irrigation; see that the container empties every 2-4 weeks. It is recommended that the 25 liter tank be covered and kept shaded.

#### Infusion treatment:

Add 1 liter of KF-30 to 5 liters of water. Turn on the irrigation system and fertilization pump according to the regular application instructions. All of the fertilizer may be administered to the garden immediately or over the course of 2-3 days.

#### Foliar spraying: For spraying:

Add 1 liter of KF-30 to 10 liters of water (100 ml to 1 liter water) and spray thoroughly until flow off – on the foliage (not on the flowers) and on the wetting area of the irrigation system on the soil, by the stem and roots. Repeat the action every 2-4 weeks. Do not mix with pesticides. Wash the sprayer thoroughly with water and soap before and after using the preparation.

#### Using a dripper:

As when spraying. Optimal spraying time: Early in the morning; not when sunlight is strong. The garden may be irrigated about an hour after spraying the preparation.

#### **KF-AMINO**

Nightshades (Solanaceae), strawberries, root vegetables:

Spraying dosage: 1-2% of volume / dosage in irrigation: 5-10 liters per hectare

Seeded fruits, vineyard, citrus, sub-tropical, persimmon

Spraying dosage: 0.5-1% of volume / dosage in irrigation: 5-10 liters per hectare

**Groves and vegetables** Foliar spraying concentration: 0.1-1.0% / waiting days: 3

**Through the irrigation system:** Quantity: 10-20 liters per hectare every 21 days / without waiting days

#### KF-SERFICO

Nightshades (Solanaceae), strawberries, root vegetables:

Spraying dosage: 0.5-1% of volume / dosage in irrigation: 5-10 liters per hectare

Seeded fruits, vineyard, citrus, sub-tropical, persimmon

**Spraying dosage:** 0.2-0.5% of volume / dosage in irrigation: 5-10 liters per hectare

**Groves and vegetables** Foliar spraying concentration: 0.1-1.0% / waiting days: 3

#### KF-OLIVE

Foliar spraying: 0.8-1.2%

Waiting days: 4 (choosing a volume for full foliage coverage)

**Through the irrigation system:** 10-20 liters per hectare after the picking, at the spring awakening, after forming early fruit toward hardening of fruit pit

# KF

The various KF series products are tested in studies initiated each year by VGI, in Israel and abroad, across a wide variety of crops.

We advise/guide growers based on the findings of these studies. At the same time, additional studies are conducted on the preparations we develop by research institutions and growers.

Tens of studies carried out over the last two decades have shown that use of KF preparations is effective in increasing harvests and improving their quality.

The main studies and findings can be found in this catalogue.

The practical facts in the field speak for themselves.

Farmers and growers have testified that use of KF products has resulted in higher yield, and landscape experts and gardeners have told us that they achieve healthier, more beautiful plants.

In short, pure profit for all.

# KF PURE PROFIT

for the soil and roots

for the garden and the environment

for the gardener and the farmer

for the land and the crops

for all!



Manufacturer and licensee:

VGI Agricultural Products Development P.O. Box 127 Moshav Mazor 7316000 Tel. +972-3-5407320 www.vgi.co.il / info@vgi.co.il



This catalogue is printed on Shiro ecologic paper, 100% recycled FCS cellulose, produced by using 100% green energy.