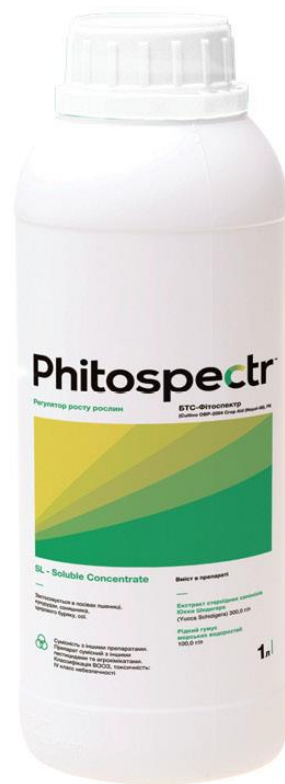


Phitospectr™





Basic needs for growing crops in modern conditions

Protection against biotic and abiotic factors

Improving stress tolerance of plants

Enhancing immune system of plants

Improving soil fertility

Increasing productivity and crop yield

Improving quality characteristic of grown products

Increasing profits per hectare



INNOVATIVE solution

SOPHISTICATED

MULTIFUNCTIONAL

HIGHLY CONCENTRATED

COMPLEX

BALANCED

PLANT GROWTH REGULATOR

ANTISTRESSANT

WITH PROTECTIVE AND

STIMULATING EFFECT

OF BIOLOGICAL ORIGIN



Producing country – Canada

Made from vegetable raw materials

Contains Yucca Shidiger plant extract
and seaweed humus

Yucca Shidiger plant extract is obtained from
shredded particles by cold pressing
technology

No chemical solvents are used in the
production process

Contains a high concentration of steroid
glycosides having a universal anti-stress
effect mechanism

Is a natural wetting agent – adjuvant

Non-toxic to humans and the environment

(hazard class IV)



Contains a complex of biologically active substances (more than 60)

Carbohydrates (including steroid glycosides) – 27-30%

Auxins

Alginic acid

Betaine, cytokinins, saturated and unsaturated carboxylic acids, mannitol, gibberellin, proteins, fats

Vitamins: A, C, E, group B

Basic organic acids:

Humic

Fulvy

Ulmin

Macro- and microelements in chelated form:

potassium, nitrogen, sulfur, copper, magnesium, calcium, strontium, sodium, phosphorus, silicon, lead, chromium, manganese, boron, iron, nickel, barium, selenium, etc.



The most important component containing the extract of Yucca Schideger plant are Steroid glycosides:

Soft nonionic surfactants with reactive groups – “traps” of reactive oxygen species and free radicals

Play a crucial role in the adaptation of plants to environmental conditions, in overcoming stressors of biological and abiotic origin

By building into the cell membrane:

- change its permeability
- promote transmembrane delivery of nutrients
- ensure inclusion of nutrients in intracellular synthesis

Launch the processes of cellular regulation of natural protective and restorative mechanisms of plants, redox system and phytohormones

Improve natural immunity and stress tolerance of plants to biological and abiotic factors - systemic acquired resistance



Phitospectr™

Used on all types of crops and soil

Helps increase the activity of immune system of plants:

- Fungicide
- Antibacterial
- Antiviral

Increases plant resistance to diseases:

septoria, root rot, brown rust, bacteriosis, powdery mildew, late blight, reticulate spot

Used in tank mixtures, increases efficiency of agrochemicals

Reduces the level of pests adaptation to insecticides



Phitospectr™

How Phitospectr works in a plant

Membrane-active properties of the product:

- ✓ Promotes transmembrane transfer of nutrients
- ✓ Promotes the activation of intracellular processes
- ✓ Provides inclusion of nutrients into intracellular synthesis

Initiates the processes of cellular regulation of plant mechanisms

- Natural anti-stress
- Growth activating
- Immunostimulating

Increases pathogenetic resistance

Activates photosynthesis, protein-nucleic and hormonal metabolism

Participates in formation and strengthening of the plant's antioxidant system

Boosts the plant's immune system



**PHITOSPECTR – a plant growth regulator, anti-stress, with stimulating effect.
Helps stimulate the development of plants growth processes**

**Stimulation of
generative organs and
fruits development**

Yield increase

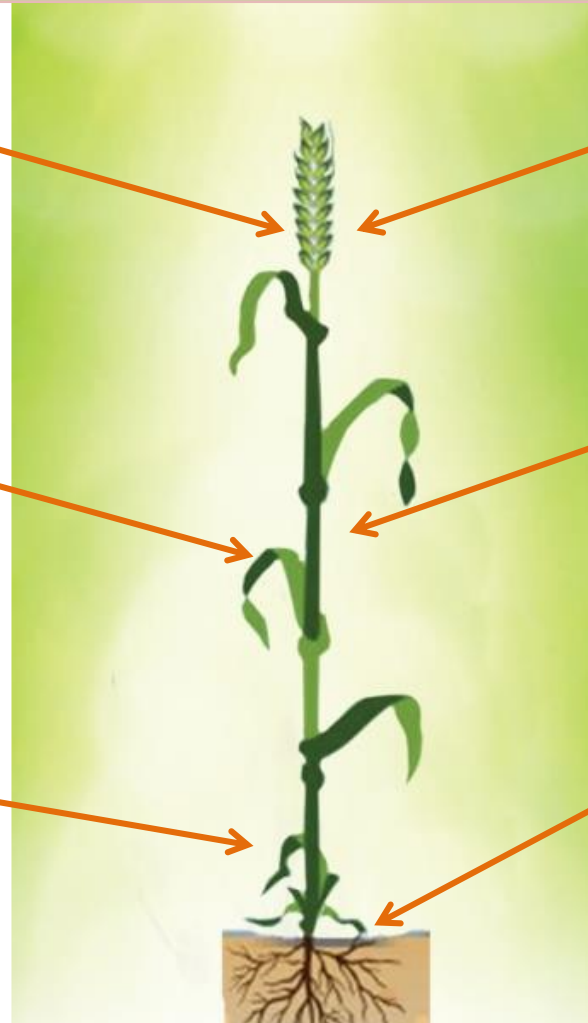
**Stimulation of leaf
apparatus
development**

**Increases usage of
fertilizer elements**

**Stimulation of growth
processes**

Stimulation of rooting

**Improving immune system of
plants**



**PHITOSPECTR – a plant growth regulator, anti-stress, with stimulating effect.
Improves plant resistance to stress caused by short-term adverse abiotic factors**

Heat

After herbicide stress

Low temperature

Insufficient nutrition

Improves soil structure

Excessive soil moisture

Insufficient soil moisture

Soil compaction

Increases the number of available elements in soil

Phitospectr™

Application

Nano-doses

Sowing rate – 5 ml/t

Cost of processing seeds – 2\$/t

Cost of foliar application – 5-12 \$/ha

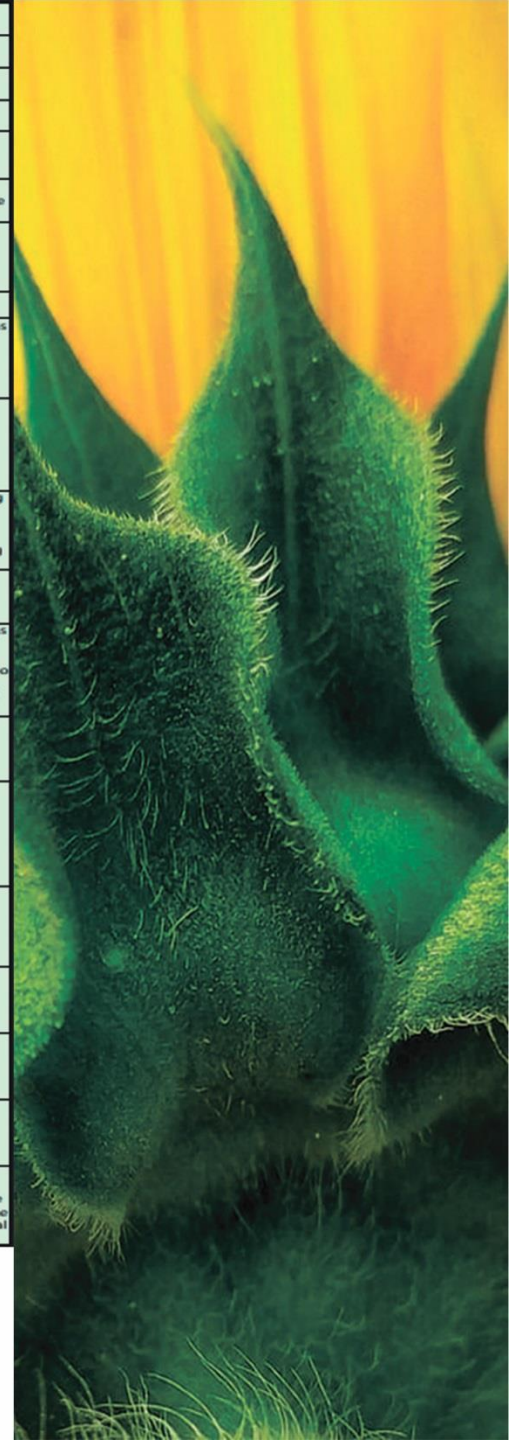
The cost depends on the rate of water outflow (*1.25 ml of concentrate per 10 l/working solution), condition of plants, multiplicity of treatments

For the most effective overcoming of biological and abiotic factors, it is recommended to apply Phitospectr in the early stages of organogenesis

RECOMMENDATIONS FOR USE				
Pre-sowing treatment of seeds				
Cereals, legumes, industrial crops	5 ml/t		Seed dressing before sowing	
Foliar treatment of plants				
Groups and crops	Multiplicity of treatments	Pouring rate of the working solution, l/ha	Application rate, ml/ha	Application phase
Cereal crops (spring and winter barley)	1	150-250	20-30	I - budding phase booting phase
Cereal crops (spring and winter wheat, oats, millet, winter rye, corn for grain)	2	150-200	20-25	I - budding phase II - booting phase
Corn	2	150-250	20-25	I - phase of 3-5 leaves II - from phase 6 to 9th leaf
Industrial crops (sunflower, rapeseed, winter tayar)	3	150-250	20-30	I - phase of obtaining seedlings II - phase of 2-8 pairs of real leaves III - in the period from the beginning of budding to flowering
Sunflower	3	150-250	20-30	I - phase of 2-4 pairs of real leaves II - phase of 6-8 pairs of real leaves III - in the phase from the beginning of budding (astisk) to flowering
Winter rape	3	150-250	20-30	I - from the phase of obtaining seedlings to 2-4 pairs of real leaves II - restoration of vegetation III - phase from the beginning of budding to flowering
Sugar beet	2	150-200	20-25	I - phase of closing leaves in rows II - phase of closing leaves in interrows
Legumes (soy, peas, etc.)	3	150-250	20-30	I - phase of obtaining seedlings before the formation of 2-3 trifoliate leaves II - from the stemming phase to the beginning of budding III - phase of the beginning of flowering
Fruit crops (apple, etc.)	3-5	1000	100-125	I - in the bud opening phase II - in the rose bud phase III - after flowering IV - fruit development V - in 14 days
Grapes	3-5	1000	100-125	I - before flowering II - after flowering III - in the phase of the beginning of the growth of berries IV - in the phase of closing of berries in a cluster V - berries browning
Berry bushes (currant, etc.)	3-5	500-600	50-60	I - before flowering II - after flowering III - in the phase of the beginning of berries growth IV V - in 14 days
Strawberries	2	400	40	I - when the growing season resumes II - at the beginning of flowering
Vegetable crops (cucumbers, tomatoes, carrots, cabbage, etc.)	1-2	150-250	20-25	I - in phase of 2-6 pairs of real leaves II - in 15 days after the first treatment
		400	40	
Fruit crops (watermelon, melon, pumpkin)	2	150-250	50	I - in the phase of 2-4 pairs of real leaves II - at the beginning of flowering
Decorative plants (boxwood, etc.)	2-3	500-600	50-60	I - before budding II, III - in 15 days (for flowers) For non-flowering plants, three treatments in the first half of the growing season with an interval of 15 days

The rate of Phitospectr application depends on the rate of water outflow (*1.25 ml of concentrate per 10 l of water)

For the most effective overcoming of biological and abiotic factors, it is recommended to apply Phitospectr in the early stages of organogenesis



Mother liquor must be used when the product is applied

Mother liquor must be used when Phitospectr is applied both in seed treatment process and in foliar application.

Norm when processing seed material – 5 ml/t

Prepare the mother liquor: add 45 ml of water into 5 ml of the product and mix it well.

Prepare the working solution: dissolve the prepared 50 ml of mother liquor in 2-2.5 liters of water.

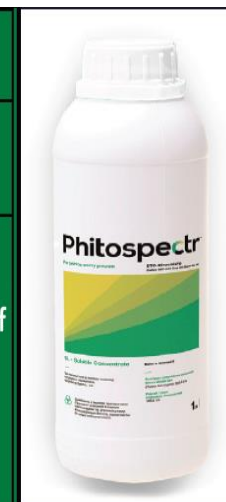
Take 2.0 - 2.5 l of the working solution of Phitospectr for 1 ton of seeds, add a poisoner according to the instructions for its use per 1 ton of seeds, add water to increase the volume to 10 liters,

treat the seeds according to the regulations.



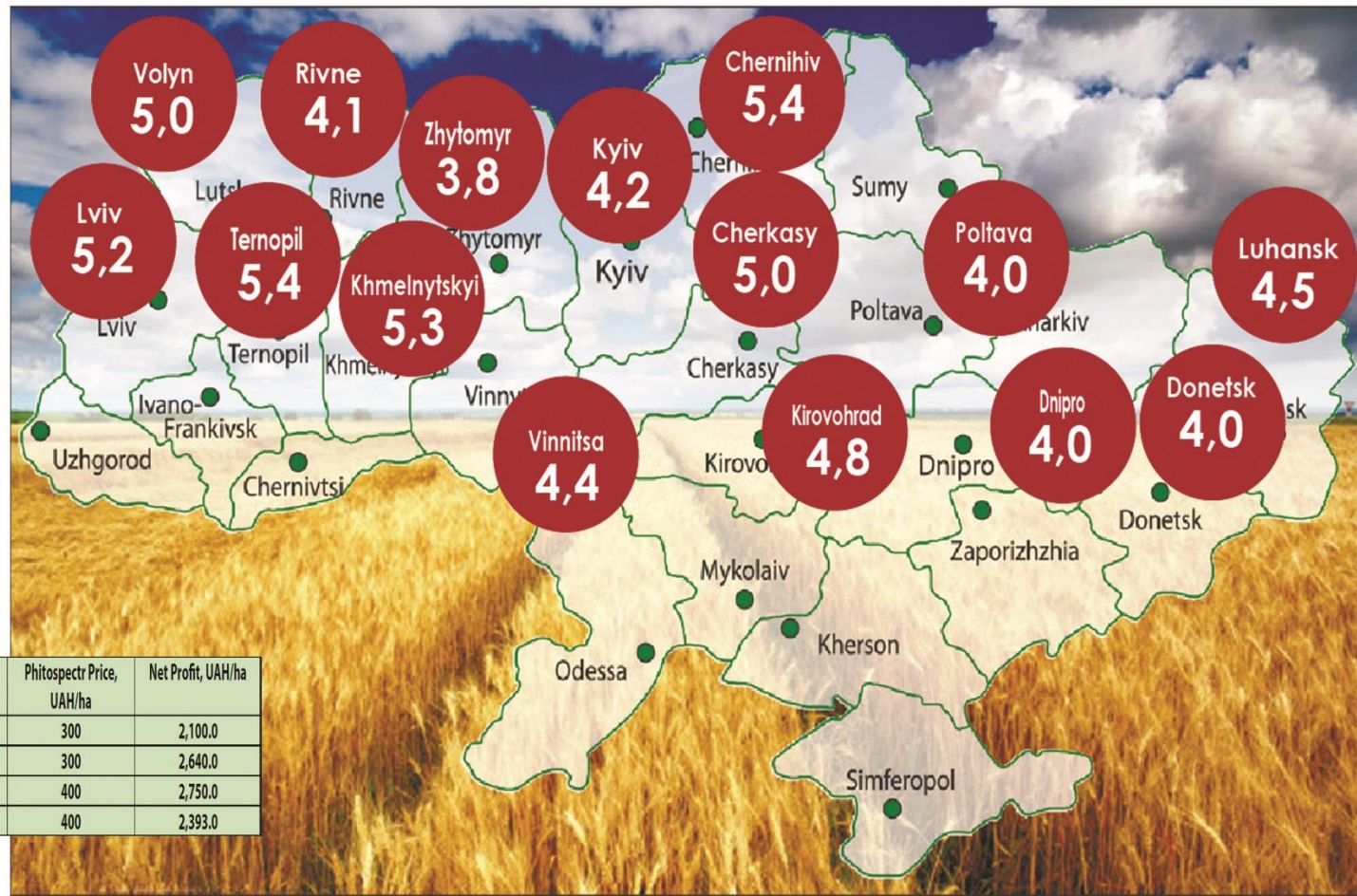
Scheme of Working Solution Preparation when Applied Foliarly

Water consumption rate for 1 ha, l	Phitospectr consumption rate for 1 ha	Preparation of mother liquor	Preparation of working solution
100	12,5	add 110 ml of water into 12.5 ml of the product	Dissolve the mother liquor in 2-2.5 liters of water, mix it well and pour into mixer or plant sprayer
150	20	add 180 ml of water into 20 ml of the product	
200	25	add 225 ml of water into 25 ml of the product	
250	30	add 270 ml of water into 30 ml of the product	



Increase in winter wheat yield in 2020-2022

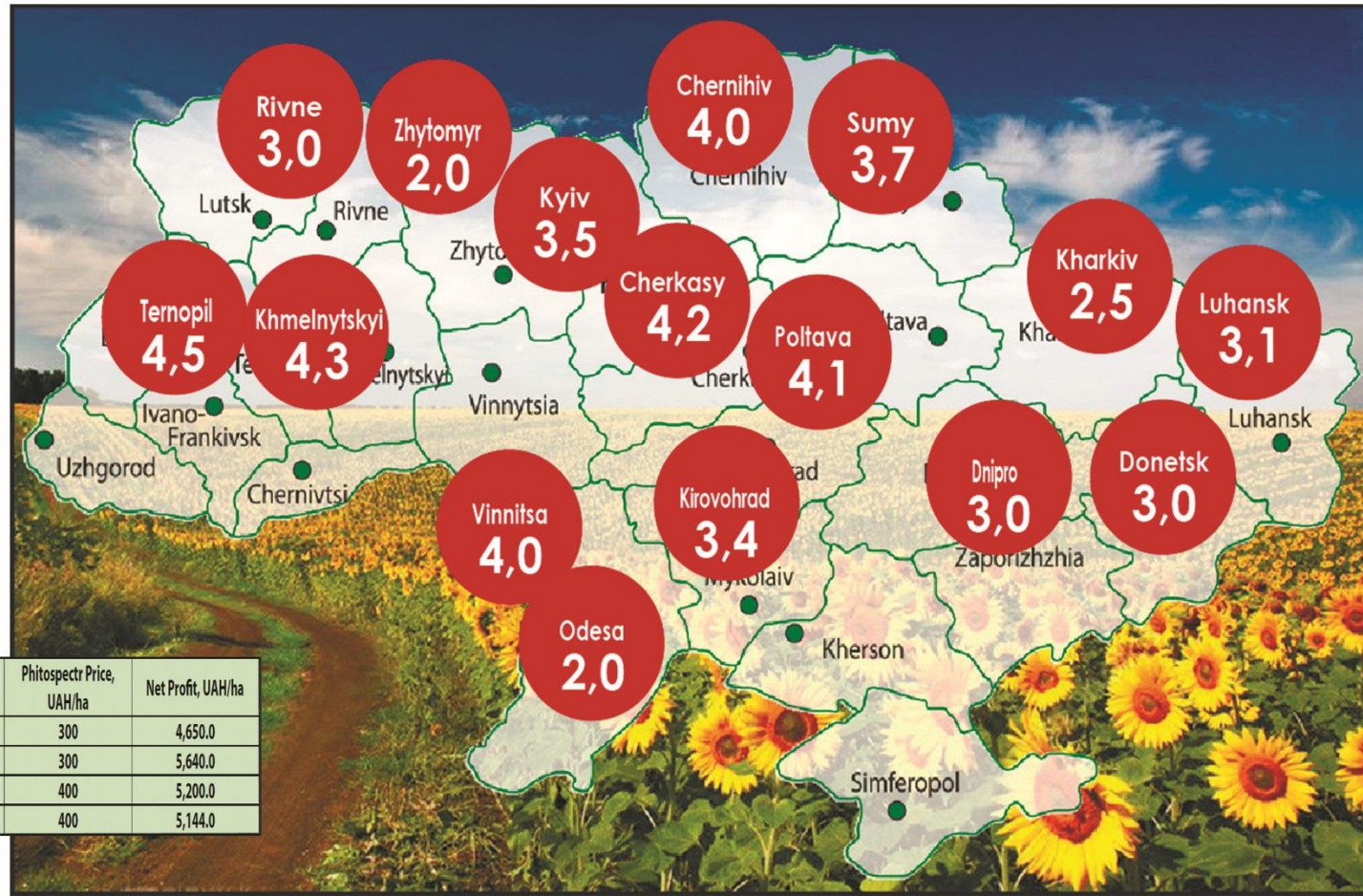
When Phitospectr was applied to winter wheat in different soil and climatic areas of Ukraine, the average increase in yield was more than 4.2 centners/ ha, which allowed farms to obtain additional economic profit – more than 600% of the funds spent on the product.



Years	Average Increase, centneres/ha	Selling Price, UAH/centnere	Phitospectr Price, UAH/ha	Net Profit, UAH/ha
2020	4.0	600.0	300	2,100.0
2021	4.2	700.0	300	2,640.0
2022	4.5	700.0	400	2,750.0
Average for 3 years	4.2	665.0	400	2,393.0

Increase in sunflower yield in 2020-2022

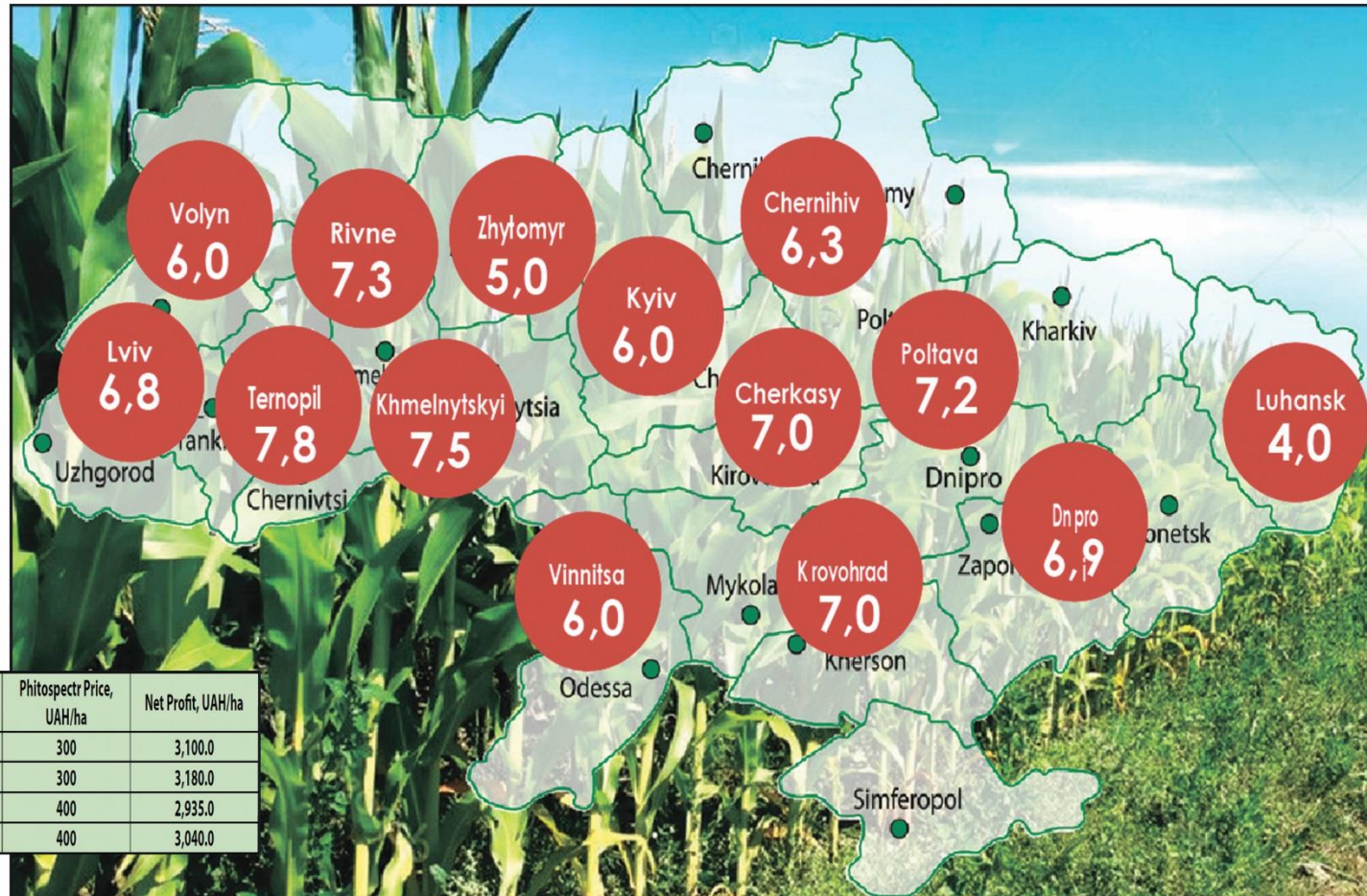
When Phitospectr was applied to sunflower in different soil and climatic areas of Ukraine, the average increase in yield was more than 3.3 centners/ ha, which allowed farms to obtain additional economic profit – more than 1,250% of the funds spent on the product.



Years	Average Increase, centners/ha	Selling Price, UAH/centnere	Phitospectr Price, UAH/ha	Net Profit, UAH/ha
2020	3.0	1,650.0	300	4,650.0
2021	3.3	1,800.0	300	5,640.0
2022	3.5	1,600.0	400	5,200.0
Average for 3 years	3.3	1,680.0	400	5,144.0

Increase in corn yield in 2020-2022

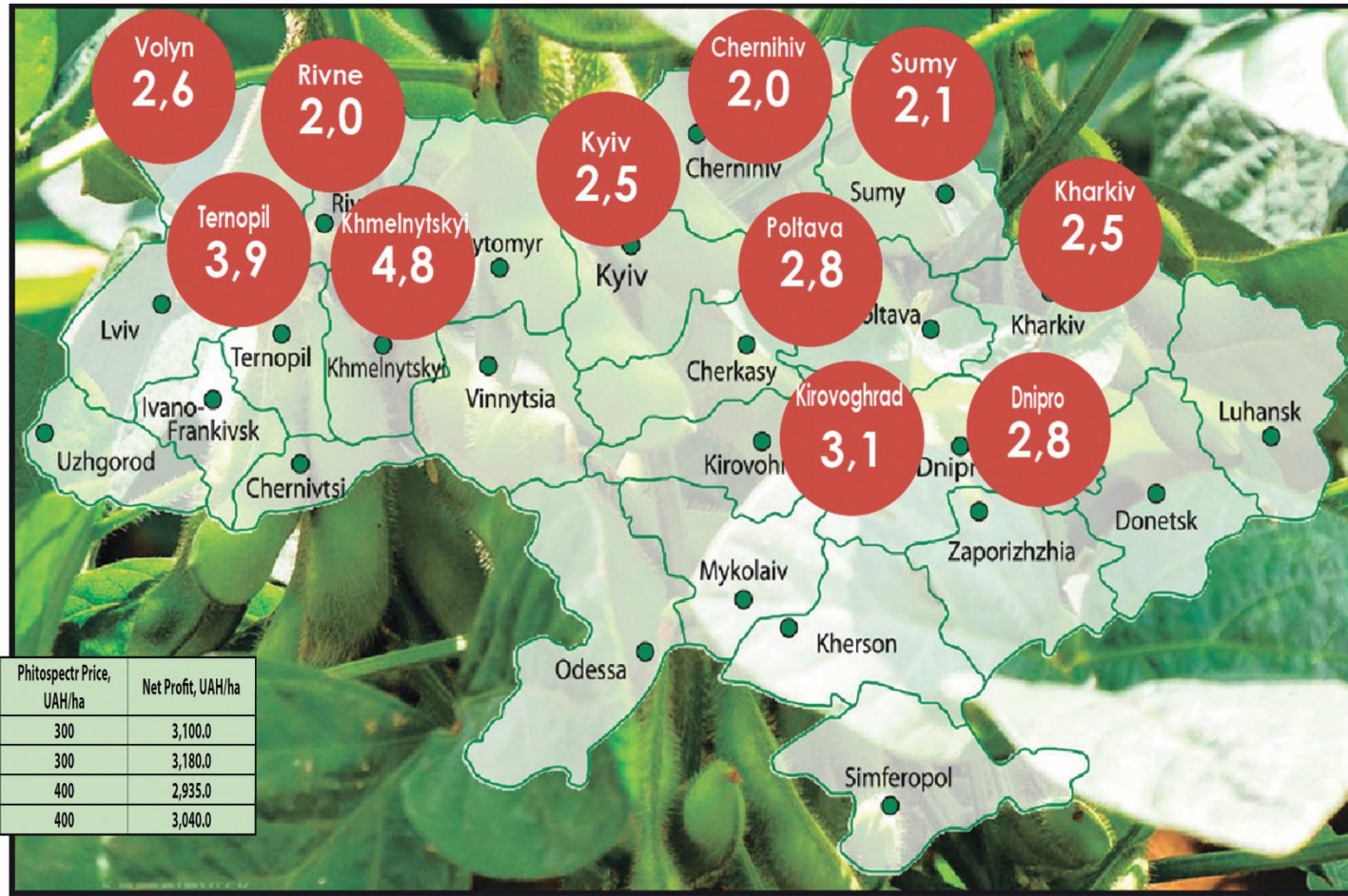
When Phitospectr was applied to corn in different soil and climatic areas of Ukraine, the average increase in yield was more than 6.4 centners/ha, which allowed farms to obtain additional economic profit – more than 1,000% of the funds spent on the product.



Years	Average Increase, centners/ha	Selling Price, UAH/centnere	Phitospectr Price, UAH/ha	Net Profit, UAH/ha
2020	2.0	1,700.0	300	3,100.0
2021	2.4	1,450.0	300	3,180.0
2022	2.9	1,150.0	400	2,935.0
Average for 3 years	2.4	1,433.0	400	3,040.0

Increase in soybeans yield in 2020-2022

When Phitospectr was applied to soybeans in different soil and climatic areas of Ukraine, the average increase in yield was more than 2.4 centners/ ha, which allowed farms to obtain additional economic profit – more than 750% of the funds spent on the product.



Years	Average Increase, centners/ha	Selling Price, UAH/centnere	Phitospectr Price, UAH/ha	Net Profit, UAH/ha
2020	2.0	1,700.0	300	3,100.0
2021	2.4	1,450.0	300	3,180.0
2022	2.9	1,150.0	400	2,935.0
Average for 3 years	2.4	1,433.0	400	3,040.0



Phitospectr™

Efficiency of using Phitospectr

- Improves the immune system of plants**
- Stimulates natural, natural-protective reactions of plants**
- Increases the plant's ability to overcome stressful conditions**
- Reduces the impact of biological and abiotic factors on plants**
- Increases the effectiveness of chemicals in tank mixtures**
- Stimulates plant growth and development**
- Increases natural fertility of soil**
- Increases productivity and reveals potential of plants**
- Increases quality and yield of grown products**
- Reduces costs per hectare**
- Multiplies profits**



**We thank you
for your attention!**

www.greenplants.in.ua

www.phitospectr.com

