

Biovin® JARÐVEG SVINUR

The natural amendment for healthy soil

**100% ORGANIC SOIL IMPROVER WITH SILICON.
FOR STRONGER AND HEALTHIER PLANTS.**

The organic base of Biovin consists of grape mark (organic remains of grape pressing) The strict control on the fermentation process of this waste that's rich in sugars results into a controlled bacterial production of effective growth factors (auxines), organic plant nutrients and billions of active and beneficial micro-organisms. Among these are the important nitrogen fixating bacteria (actinomycetes) and SAR-microbes (Systemic Acquired Resistance), or resistance to plant threatening organisms. Another important aspect is that Biovin plays an important role in stimulating mycorrhizal relationships to create a living interface between roots and soil Biovin is a certified organic fertilizer / soil improver in Zwitserland, Germany, The Netherlands, Greece, Austria and many other European countries for use in certified organic and conventional farming schemes. Biovin is a product that always goes through the same process of humification.

Biovin can be used as a true soil improvement in all soil-depending production, landscaping, hydroseeding and landreclamation Ever since it's invention in 1974, a minimum of 45 scientific reports are published. All results have in common that Biovin increases the uptake of minerals and prevent nitrogen from leaching. Nitrate is being transformed back into nitrite and ammonium. This cycle is repeated over and over.

DIRECTIONS FOR USE:

800 – 1000 kilo/ ha or 0,5-1% volume by weight as substrate mix for all potting soils.
3-5% mix for top dressing or in complete sand based mixes for greens and sportfields

ADVANTAGES OF BIOVIN.

- Is a perfect basis for the Plant Health Cure agricultural programs and for PHC's grass program.
- Stimulates development and symbiotic activity of mycorrhizae
- Stimulates plant health and resistance (SAR= Systemic acquired resistance)
- Stimulates growth and functionality of beneficial soil/ root bacteria
- Natural organic fertilizer (3:1:2)
- Guaranteed free of diseases or weeds
- Avoids nitrate leaching to ground water and keeps minerals available for plants.

CHEMICAL ANALYSIS

Dry matter	78,6%
Total N:	2,5%
Organic N:	2,2%
Total P:	1,5%
Total K:	2,5%
Total Mg:	0,3%
Total Ca:	1,3%
Total Si:	5,3%*
Humus /Fulvic acids:	66,7%
Total Fe:	1420 ppm.
Total trace elements	132 ppm. (Cu, Mn, Zn, Co, Mo & Ni)
pH :	6,5 - 7

*Silicon (SiO₂) is an important mineral with the properties of what normally would be connected with Kalium. The old Romans used the word Potassium for ash. Potash was spread over the land to give stronger and firmer plants with less diseases. Kalium is a mining salt and only introduced in fertilizers from 1920. Silicium can be easily absorbed by mycorrhizal hyphae. The ready to absorb Silicon is important for strength

DOSAGE

- Gras / hayproduction	800 kg/ha
- Vegetables, fruit and softfruit	1.000 kg/ha
- Corn / wheat / barley	1.000 kg/ha
- Greenhouses, flowerproduction	1.000 kg/ha
- Potting soils for pots of ½ ltr and up	7 kg per m ³
- Cuttingtrays	5 kg per m ³
- Seedtrays	5 kg per m ³



A world renowned soil quality improver with high amounts of probiotic bacteria to improve soil and compost quality. Improves nutrient uptake dramatically. Guaranteed free of (weed) seeds



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Don't use Biovin in trays or cups smaller than 250 cc. Please ask our specialists for the reasons and alternatives.

USE IN COMBINATION WITH OTHER PHC PRODUCTS

- **Sportsturf , golfgreens and plant borders**
Mix 5% Biovin with Top-Dressing sand. Combine with regular use of PHC FLEXX. As additional stress relief for turf. Spread in spring and fall 100 gram per m². Irrigate with water.
- **Container plants**
0,5-1% Biovin (5-10 kilo/m³) mix with potting substrate
For mycorrhizal colonisation add PHC VA Cocktail (Media Mix) together with Biovin in the substrate.
- **Seedbeds**
10 kg Biovin per 100m².

The water content in Biovin is not just water. It has all the characteristics of Biovin Liquid and contains essential elements of Biovin.

CHEMICAL/PHYSICAL ANALYSIS	natural humid, in%	absolutely dry, in%
pH value	7,31	n.d.
Water (H ₂ O)	48	0,00
dry substance	78,60	100,00
ash	9,70	12,34
organic part (analysis in % of total product)	68,90	87,66
entire nitrogen (N)	2,35	2,99
nitrate nitrogen (NO ₃ -N)	0,05	0,06
ammonia nitrogen (NH ₄ -N)	0,11	0,14
organ. bound nitrogen	2,19	2,79
entire phosphoric acid (P ₂ O ₅)	0,57	0,73
entire potassium (K ₂ O)	2,39	3,04
lime (CaO)	1,32	1,68
magnesium	0,32	0,41
sodium	0,01	0,01
non-soluble hydrochloric acid	3,38	4,30
sulphate (SO ₃)	0,35	0,45
carbon acid (CO ₂)	0,28	0,36
carbon (C)	38,80	49,36
humic subst. (from total org. part)	66,74	84,91
nitrogen : carbon (N : C)	0,06	0,00
Trace element analysis	ppm	ppm
copper (Cu)	27,00	34,40
manganese (Mn)	50,00	64,00
iron (Fe)	1420,00	1807,00
zinc (Zn)	29,00	37,00
cobalt (Co)	0,40	0,51
molybdane (Mo)	2,88	3,66
lead (Pb)	1,20	1,53
cadmium (Cd)	0,20	0,25
chromium (Cr)	13,30	16,90
nickel (Ni)	8,50	10,80
arsenic (As)	0,00	0,00

Growth factors

n.d. = non detectable

<u>Vitamins and hormones</u>	µg/100g humid substance	µg/100g dry substance
Thiamine	22,75	46,80
Pyridoxole	45,59	87,89
Riboflavin	99,52	191,00
Nicotinamide	115,57	229,50
Nicotinic acid (total)	160,00	n.d.
Zeatin (Cytokinine)	n.d.	0,5 - 1
Auxine	n.d.	3 -5

Microbiological content per gram humide product

Fungi 10 ⁷ /g	Streptomycetes 10 ⁷ /g	Bacteria 10 ⁸ /g
Aspergillus niger	S. griseoruber	Bacillus sp.
Mucor miehei	S. rimosus	Pseudomonas sp
Myceliophthora thermophila	S. thermoflavus	Arthrobacter sp.
Paecilomyces varioti	S. actuosus	Cellulomonas sp
Thermomyces lanuginosus	S. atroolivaceus	Nitrosomonas sp
Yeasts		

PACKAGING: Available in: 20 kilo bags. Pallets: 40 bags per euro pallet. And in Bigbags (600 kg).

LIMITED WARRANTY
Plant Health Cure offers for sale the product Biovin. THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE which extend beyond the description of the product in this specification sheet or other product literature, and liability of Plant Health Cure is limited to replacement of any product which does not meet these specifications. Suggestions for use and information on results obtained with its use are assumed by the manufacturer to be reliable.

Since conditions of use are outside the control of Plant Health Cure, the buyer is responsible for all results, including injury and damage stemming from the use of this product alone or in combination with other materials.



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