

# Biovin<sup>®</sup>

## powder

Organic soil improver  
- the basis for  
healthy crops

Biovin is based on the organic remains of the grape pressing process (grape must). The humification of the grape must creates a product with organic plant nutrients and a great number of beneficial micro-organisms, including the important nitrogen-fixating bacteria (actinomycetes) and SAR (Systemic Acquired Resistance) microbes. They improve resistance and tolerance for abiotic stress.



At least 45 researches have been run since 1974, all scientifically coordinated by several different government and university research stations and facilities. The outcomes always indicate that Biovin promotes the uptake of mineral fertilizers and prevents nitrate leaching. The nitrates are converted into ammonium nitrogen for the plants. The use of Biovin achieves major savings in the use of manure and/or fertilizer and can reduce leaching.

- Contains essential bacteria and fungi
- Beneficial effect on ecosystem in the potting soil
- Positive effect on plant growth
- Positive effect on harvest quality
- Easy to mix
- Great diversity in spore elements
- Guaranteed free of weeds
- Prevents high nitrate levels in plants and in the soil



### USE IN COMBINATION WITH OTHER (PHC) PRODUCTS

Biovin can be used in combination with all PHC fertilizers, PHC bacterial products and PHC mycorrhiza products. The use of Biovin Liquid enhances the effect of Biovin. This creates an active soil and root environment, shedding a completely new light on the use of fertilizer, fungicides and biocides.

#### Lawns (sport fields, golf courses)

Mix Biovin with topdressing sand. Apply in March and September. Spread 10 kg/100 m<sup>2</sup> and let it withdraw with water.

#### Container cultivation

Mix Biovin with potting soil combined with MiniPlug or V.A. cocktail (mycorrhiza)

#### Packaging, transport & storage

Biovin is supplied in bags of 20 kilos (40 bags a pallet = 800 kilo), and in BigBags of 600 kg. Store dry, frost free and out of direct sunlight. Wet material can clog machinery. As with all organically sourced materials, the analysis may vary as much as 15%.

#### Seed beds

Spread 10 kg of Biovin per 100m<sup>2</sup> and V.A. cocktail mycorrhiza spores or Pt spores. Prepare the seed bed using a rotating cultivator and seed or plant it.

#### Planting trees/shrubs

Mix 100 grams – 1 kg of Biovin through the soil for the plant hole.



## We Grow Soil.

**Health and safety information**

Do not ingest. Wash hands after use. Wear protection clothing and respiratory protection (fitted with a P3 dust filter) when loading/using this product. In case of accidents or feeling ill, seek medical assistance (if possible, show this label). KEEP OUT OF REACH OF CHILDREN

**Product licences**

Biovin is an organic biostimulant and is approved for use in organic farming in accordance with EU Regulation 834/2007 and NOP NF U 44-051.

**INGREDIENTS**

Humified grape must 100 %

**DOSAGE**

Container cultivation	3 kg per m <sup>3</sup>
Vegetables, fruit & berries	1,000 kg/ha
Lawns	100 g/M <sup>2</sup>
Greens	80-100 g/M <sup>2</sup>

**ADDITIONAL INFORMATION**

Different doses may apply for the recovery of fields in poor (bio) condition. Consult your PHC crop advisor for tailor-made advice.

**CHEMICAL ANALYSIS**

Properties	Value		
pH value	7.31	Sulphate (SO <sub>3</sub> )	0.35
Density	0.77	Carbon dioxide (CO <sub>2</sub> )	0.28
Dry matter	78.60	Carbon (C)	38.80
Organic matter	68.90	humus components (of tot.org. matter)	66.78
Ash	9.7	Nitrogen : carbon (N : C)	0.06
<b>Chemical analysis</b>	<b>% of weight</b>	<b>Spore elements</b>	<b>ppm</b>
total nitrogen (N)	2.35	Copper (Cu)	27.00
nitrate nitrogen (NO <sub>3</sub> -N)	0.05	Manganese (Mn)	50.00
ammonium nitrogen (NH <sub>4</sub> -N)	0.11	Iron (Fe)	1420.00
organically bound nitrogen	2.19	Zinc (Zn)	29.00
total phosphate (P <sub>2</sub> O <sub>5</sub> )	0.57	Cobalt (Co)	0.40
total potassium (K <sub>2</sub> O)	2.39	Molybdenum (Mo)	2.88
Calcium oxide (CaO)	1.32	Lead (Pb)	1.20
Magnesium	0.32	Cadmium (Cd)	0.20
Sodium	0.01	Chromium (Cr)	13.30
insoluble hydrochloric acid	3.38	Nickel (Ni)	8.50
		Arsenic (As)	0.00

**GROWTH FACTORS**

Humins (formed in the process)	66.7 %	Nicotinamide	99.52 µg/100g
Thiamine	22.75 µg/100g	Nicotinic acid (total)	115.57 µg/100g
Pyridoxal	45.59 µg/100g	Zeatin (cytokinin)	160.00 µg/100g

**MICROBIOLOGICAL CONTENT PER GRAM****Soil fungi 10<sup>7</sup> /g**

Aspergillus niger
Myceliophthora thermophila
Paecilomyces varioti
Thermomyces lanuginosus

**Streptomyces 10<sup>6</sup> /g**

S. griseoruber
S. rimosus
S. thermoflavus
S. actuosus
S. atroolivaceus

**Bacteria 10<sup>8</sup> /g**

Bacillus sp.
Pseudomonas sp.
Arthrobacter sp.
Cellulomonas sp.
Nitrosomonas sp.

**GUARANTEE**

Biovin® is sold by Plant Health Cure. When using the product, always follow the instructions on the package carefully. We do not guarantee the suitability of the product beyond its originally intended application. Plant Health Cure is only liable to replace products that do not meet the specifications. Suggestions for use and information about the results of product use obtained from the manufacturer can be considered reliable. Since Plant Health Cure cannot verify the conditions of use, the buyer/user is responsible for all results, including injury or damage resulting from the use of this product alone or in combination with other products. Keep out of the reach of children.

The latest new version of the data sheet can always be found on [www.phc.eu](http://www.phc.eu).