Pannonia | GOLD DDGS

PannoniaBio

Pannonia Bio produces **DDGS**, i.e. Distillers Dried Grains with Solubles, as a coproduct of ethanol production, and sells it as a feed ingredient to key industry members of both domestic and international markets. During the manufacturing process, the starch content of corn is extracted, which concentrates its nutrient content. With its elevated protein, vegetable fat, and phosphorus content, DDGS has been proven to promote weight gain in livestock and increase in milk yield. Its use can partially substitute soybean meal, which is mainly imported from the American continent and is one of the most expensive elements of feed manufacturing. DDGS also serves as an excellent alternative for sunflower and rapeseed meal in formulations.

Recommended use

The use of **Pannonia Gold** is recommended for both small- and large-scale farming of **beef cattle,** dairy **cows, pigs,** and **poultry,** and also offers an economical and reliable protein source for **aquaculture** and pet **foods.**

Benefits of using Pannonia Gold

- Excellent source of energy, digestible protein, and phosphorus
- Guaranteed GMO and antibiotic-free
- Stable quality, consistent nutrient composition
- Produced using a gentle heat treatment technology, easy to digest
- Its dried yeast cell content is prebiotic and aids digestion
- Toxin testing is controlled by a market-leading system
- Available by road, rail and river transport
- Economical basis for feed: its use can replace soybean meal and other protein sources, making livestock production more profitable

Product specifications

Crude Protein	>33.0%
Digestible Protein	83%
Crude Fat	>9.0%
Crude Fiber	>4%
Ash	4.0-6.0%
Starch	>3.0%

The parameters are based on dry matter and are provided for informational purposes only.

Thomas Nolan

+36 30 678 33 69

tnolan@pannoniabio.com

pannoniabio.com

Pannonia GROW

PannoniaBio

Pannonia Bio has expanded its innovative line of products supporting circular agriculture with an organic soil fertilizer called **Pannonia Grow.** Pannonia Grow has a 7% nitrogen content and is produced through the anaerobic breakdown of corn fiber. It is suitable for use in organic farming, traditional agriculture, and hobby gardening alike. In addition to its high organic matter content, it is also rich in essential micronutrients vital for plant growth. It is proven to promote the proliferation of microorganisms, the increase of crop yield, and the soil's biological activity.

Benefits of using Pannonia Grow

- Promotes humus formation
- Taller plants
- Greater yields
- Improved quality parameters
- Suitable pH level
- Its initial impact is rapid and sustained long term.
- Works effectively at low temperatures

Suitable for use in organic agriculture.

Proven results

Test Results

Download the detailed test results by scanning the QR code.

Product specifications

Moisture level	max. 20%
pH (in a 10% aqueous suspension)	5.2-6.2%
Organic components	>85.4 m/m%
Nitrogen	>7 m/m%
P_2O_5	>1.3 m/m%
K_2O	>1.3 m/m%

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Bálint Polyák

+36 30 256 6244

bpolyak@pannoniabio.com

pannoniabio.com

Pannonia | BPC
BARLEY PROTEIN CONCENTRATE

PannoniaBio

The protein concentrate produced at **Pannonia Bio Zrt.**'s new barley processing plant is a true rarity in the European feed market. The company in Dunaföldvár was the first in the world to successfully implement the revolutionary technology on an industrial level, through which they have been able to fill a gap in the market with their barley-based feed ingredient with a minimum of 60% protein content.

This versatile concentrate provides a locally produced, economical and safe alternative to the imported concentrated protein sources of uncertain origin (such as corn gluten, wheat gluten, potato protein, and soy concentrate) used for feeding ruminants, pigs, and poultry. Additionally, this GMO-free feed ingredient also has significant potential in aquaculture and the pet food segment.

Recommended use

The use of **Pannonia Barley Protein Concentrate** is recommended for both small- and large-scale farming of dairy **cows, pigs,** and **poultry.** Additionally, it proves to be an economical and reliable protein source in **aquaculture** and **pet food.**

Benefits of using Pannonia BPC

- Provides a highly digestible, exceptionally high concentrated protein source
- Guaranteed GMO and antibiotic-free
- Can replace soybean meal
- Safe due to its production using Hungarian supply chain
- Neutral flavour, easy to blend
- Flexible transportation and storage due to its big-bag bulk packaging
- Practical use due to its pelletized format
- Controlled by a market-leading toxin testing system

Product specifications

Crude Protein	≥60.0%
Crude Fat	≥6.0%
Crude Fiber	≤3.5%
Ash	≤2.0%
Starch	≤1.2%

The parameters are based on dry matter and are provided for informational purposes only.

Thomas Nolan

+36 30 678 33 69

tnolan@pannoniabio.com

pannoniabio.com

Pannonia | CPC

CORN PROTEIN CONCENTRATE

PannoniaBio

Pannonia Bio's corn-based protein concentrate is a true rarity in the feed market that can partly - or when used in conjunction with amino acid supplementation, entirely - replace soybean meal. Thanks to the unique development of the biorefinery in Dunaföldvár, it has low crude fiber content. In addition to being exceedingly efficient, it also ensures feed safety, as it is made from guaranteed GMO- and antibiotic-free feed corn.

Recommended use

The use of **Pannonia Corn Protein Concentrate** is recommended for both small- and large-scale farming of dairy **cows, pigs,** and **poultry.** Additionally, it proves to be an economical and reliable protein source in **aquaculture** and **pet food.**

Benefits of using Pannonia CPC

- Excellent source of energy, easily digestible protein, and phosphorus
- Guaranteed GMO and antibiotic-free
- Neutral flavour, easy to blend
- Its dried yeast cell content is prebiotic, aiding digestion
- Made with gentle heat treatment technology
- Easy to digest
- Low crude fiber content, outstanding feed conversion
- Flexible transportation and storage due to its big-bag bulk packaging
- Practical use due to its pelletized format
- Controlled by a market-leading toxin testing system

Product specifications

Crude Protein	≥50.0%
Crude Fat	≥9.0%
Crude Fiber	≤3.0%
Ash	≤4.0%
Starch	4.0-7.0%

The parameters are based on dry matter and are provided for informational purposes only.

Thomas Nolan

+36 30 678 33 69

tnolan@pannoniabio.com

pannoniabio.com

Pannonia
BARLEY HUSK

PannoniaBio

With the launch of its world-class barley processing plant, **Pannonia Bio Zrt.** has further elevated its significance in both domestic and international agriculture. The company expanded its range with a high-fiber, economical bran product marketed under the name **Barley Husk.** In the barley processing plant, the outer layers of barley are removed using milling methods, then the product is sold in pelletized form for the feed sector. Its use enhances feed energy density and improves the texture of compound feed.

Recommended use

Due to its high fiber content, the product can be an excellent supplementary nutrient source for feeding **cattle**, **pigs,** and **rabbits.**

Benefits of using Pannonia Barley Husk

- Practical pelletized format
- Can improve the shelf life of compound feed
- Economical source of fiber, protein, and phosphorus
- Improves digestion, enhances feed energy density
- Stable quality, consistent nutrient composition
- Guaranteed GMO and antibiotic-free
- Controlled by a market-leading toxin testing system

Product specifications

Crude Protein	≥8.0%
Crude Fat	≥3.0%
Crude Fiber	≤23.0%
Ash	≤6.0%
Starch	≥20.0%

The parameters are based on dry matter and are provided for informational purposes only.

Attila Szabó

+36 30 257 0975

aszabo@pannoniabio.com

pannoniabio.com

Pannonia | DCO
CORN OIL

PannoniaBio

At **Pannonia Bio's** biorefinery in Dunaföldvár, corn is broken down into its components: starch is converted into bioethanol, while protein is used to produce **DDGS.** The corn oil content is also extracted, which obtains its final form after undergoing physical separation. The high-quality vegetable oil is not only popular as an energy source; its use is also favored both domestically and internationally for its beneficial health effects. In industrial use, it reduces dusting in feed thereby increasing its cost efficiency.

Recommended use

Pannonia Corn Oil has proven to be an effective, economical, and reliable energy source in large-scale farming of **pigs** and **poultry.**

Digestibility in poultry
OVER
95%
(from the second week of age)

Digestibility in pigs
OVER
94%

Benefits of using Pannonia DCO

- Rich in unsaturated fats, thus improving digestibility and absorption
- Rich in lutein, zeaxanthin and xanthophyll, which contribute to the development of the natural colour of egg yolk
- Reduces the dusting of middlings in industrial farming, which makes feeding more cost-effective
- Improves feed palatability
- Excellent source of energy

Product specifications

Moisture	min. 0.8%
Iodine number (WIJS)	107-135 g Iodine / 100 g
COMPOSITION OF FATTY ACIDS	
C16:0	10-12%
C18:0	1.5-4%
C18:1	25-35%
C18:2	45-55%
C18:3	<3%

The parameters are based on dry matter and are provided for informational purposes only.

Bálint Polyák

+36 30 256 6244

bpolyak@pannoniabio.com

pannoniabio.com