

UMDIS
mushroom
agency

Intensive Course on

Mushroom Composting and Cultivation

November 2-6, 2026

FUNGUS S.C. Produkcja i Sprzedaż Pieczarek

with Wojtek Konieczny

partners:

Amycel · AGRO PROJECTS · GROW time engineering · ChampFood MUSHROOM SUPPLEMENTS · ATMO-CONTROL · RUB COAT SPECIAL COATINGS · Christiaens Group · RibbStyle · DMP · MUSH COMB · McDon Substrates · e-nema · CHAMPLIFY

Updated Course Program



Choose the option that fits your goals:

- Growing Technology (1-3 days)
- Composting Technology (3-5 days)
- All-in-One Program (1-5 days)

Who Should Attend?

Growers

Learn modern, high-yield cultivation techniques used on commercial farms. Get practical answers to your growing challenges and exchange real-world experience with fellow growers.

Compost Production Technologists

Master raw material biology, precise biochemical recipe calculations, and composting Phases 0 to II.

Aspiring Entrepreneurs

Gain a solid, risk-reducing foundation of technical knowledge before launching your own mushroom or compost business.

Farm Manager

Understand what your team must do to achieve stable, high-quality production. Learn management practices that boost yield, improve quality, reduce costs, and raise overall efficiency.

Program

UMDIS mushroom agency

Day – 1

Vegetative Growth Management & Fruiting Initiation (Shock)

Format: Microclimate chart analysis in class + Climate-control system calibration.

Module 1 | Water Balance Management

- Watering goals: Understanding physiological tasks of moisture at key growth stages to support cell elongation and wave density.
- Watering schemes: Designing irrigation schedules.
- Climate during watering: Coordinating air circulation and humidity for controlled evaporation without crop stress.

Practice- Farm Walk Fungus (White mushroom farm)

Module 2 | Cooling & Pin Generation Management

- Fruiting initiation (shock): Gradual reduction of air temperature and CO_2 to shift mycelium from vegetative to generative growth.
- Protecting beds from drying: Controlling air–compost temperature delta to retain moisture during climate shifts.
- Wave density management: Using gradual cooling to form multiple sequential pin generations within one flush.

Module 3 | Pinheading Specifics

- Pinheading basics: Managing environmental parameters that turn primordia into viable young mushrooms.
- Cultivation strategy shift: Moving focus from initiation to quality growth.
- Humidity control: Maintaining precise humidity boundaries.
- Other climate parameters: Fine-tuning fresh air supply, airflow speed, and temperature for daily mass gain.

Program

UMDIS mushroom agency

Day – 2

Harvesting Climate, Flush Management & Crop Protection

Format: Classroom work + Practical training in the growing room + Final technical review

Module 4 | Picking Climate & Evaporation

- Quality climate during picking: holding air speed, humidity and temperature stable while rooms are being harvested.
- How to improve evaporation during picking — and why a dry cap keeps shelf life and price.
- Climate computer settings: which set points to change, and what happens in the bed afterwards.

Practice- Farm Walk Fungus (Brown Mushroom Farm)

Module 5 | Flush Management

- Inter-flush work: shelf cleaning of stalk residues and dead pins; re-watering compost between flushes.
- End of the flush: preparation for watering — dosage and timing.
- CO2 regulation and airing for heavy, uniform second and third flushes; keeping waves separated and knowing when a flush stops being profitable.

Module 6 | Crop Protection During Cropping

- Recognising pathogens on the bed: Trichoderma, cobweb (Cladobotryum), dry and wet bubble, bacterial blotch.
- Pests: sciarid and phorid flies, mites — sticky-trap monitoring, action thresholds, when treatment pays off.
- Containing an outbreak: local treatment without spreading spores, traffic and zoning during the crop, end-of-crop cook-out.

Program

UMDIS mushroom agency

Day – 3

Spawning, Incubation & Casing Soil Specifics in Poland

Format: Lecture on spawning & European casing materials + Practical mixing and application of casing soil on the farm.

Module 7 | Spawning Technology & Hygiene

- Spawning technology and hygiene: Ensuring strict sterility, equipment disinfection (formalin), and uniform distribution of grain spawn (rye or millet) for rapid colonization.
- Spawn Run microclimate optimization: Climate protocols in growing rooms or incubation tunnels to protect developing mycelium from heat stress and molds.
- Module 6: Incubation Period (Phase III)

Module 8 | Incubation Period (Phase III)

- Main incubation goals: Maintaining parameters for aggressive, healthy vegetative mycelial growth.
- Determining incubation completion: Monitoring biological milestones and visual indicators (uniform color, characteristic mushroom smell).
- Incubation parameters: Managing air and compost temperature balance for stable hyphal development.
- Success factors in tunnel incubation: Strict hygiene and timely removal of metabolic heat to prevent local overheating.

Practice – Compost yard Fungus, Farm walk White/Brown Mushroom Farm

Module 9 | Preparing European Casing Soil

- Casing specifics in Poland: Creating a highly porous casing mix from high-quality sphagnum peat and black peat.
- pH regulation: Calculating lime or defecate dosage to create a stable slightly alkaline environment that suppresses molds (e.g., Trichoderma).
- Chemical disinfection: Treating casing with formalin to eliminate hidden pathogens, bacteria, and wild mushroom spores.
- Role of calcium: Choosing calcium sources to stabilize soil structure, retain moisture, and optimize chemical properties for fruiting.

Module 10| Casing Application, CACing & Initial Watering

- CACing technique: Introducing a small amount of colonized Phase III compost (or a special product) into the casing layer to accelerate and equalize mycelial growth.
- Initial watering specifics: Achieving deep moisture saturation without washing out peat structure.
- Preventing casing sealing: Maintaining air macropores for proper mycelial respiration during intensive watering.

Module 11 | Ruffling & Recovery Phase

- Ruffling timing and technique: Restoring casing porosity at the precise stage to stimulate uniform mycelial emergence.
- Recovery microclimate: Managing parameters for rapid vegetative growth and surface mycelial fuzzing.
- CO_2 physiology: Maintaining high CO_2 thresholds to prevent premature pin formation inside the casing.

Program

UMDIS mushroom agency

Day – 4

Raw Material Physiology, Formula Calculations & Phase 0 (Pre-wetting)

Format: Morning theory in the classroom + Afternoon practical session at the raw-material preparation yard + Introduction to compost production.

Module 12 | Mushroom Compost as an Artificial Selective Ecosystem

- Biological classification of Agaricus bisporus: Understanding its nature as a secondary decomposer (saprotroph) to explain why it requires a pre-prepared, competitor-protected nutrient medium.
- Substrate selectivity parameters: How to create a strong biochemical barrier that blocks harmful molds and ensures future crop safety.
- Scalability of biological requirements: How microflora needs (oxygen, moisture, nitrogen) are met in modern automated facilities, closed bunkers, and high-tech Phase II & III tunnels in Poland and Europe.

Practice- Farm walk, Compost yard

Module 13 | Specifics of European Raw Materials & Phase 0

- Raw material structure: Studying the physicochemical properties of high-quality wheat straw (and rye or barley straw) and chicken manure to calculate correct pre-wetting duration and prevent over-moistening.
- Managing structural component ratios: Preventing anaerobic zones and achieving correct substrate texture.
- Component mixing strategies: Technological approaches to mixing straw with broiler chicken manure and horse manure to create a stable, homogeneous mass.
- C:N ratio formula calculation: Determining correct nitrogen-rich material dosage (chicken manure) for optimal energy and nutrient levels.
- Risks of mineral nitrogen: Evaluating limitations, benefits, and structural dangers of synthetic nitrogen sources (urea, ammonium sulfate) in European practice.
- Gypsum functionality and dosage: Chemical and physical effects of calcium sulfate on manure colloid flocculation, pH reduction, and compost porosity improvement.
- Use of recycled water: Introducing thermophilic starter microflora from the compost yard drainage system to activate and accelerate fermentation.

Program

UMDIS mushroom agency

Day – 5

Active Fermentation, Pasteurization & Control of Phases I and II

Format: Biochemistry theory in class + Visit to compost production.

Module 14 | Phase I (Fermentation) as a Biochemical Reactor

- High-temperature biological processes: Impact of thermal peaks (70–80°C) and intense ammonia release on softening straw fibers for easier mycelial digestion.
- Formation of the nitrogen-lignin-humus complex: Binding volatile ammonia with degraded lignin to create a stable, safe nutrient source for mushrooms.
- Cycle optimization: Determining ideal retention time in Phase I bunkers or tunnels to maintain optimal organic matter balance.
- Aeration methodologies: Comparing forced vs passive aeration systems to eliminate anaerobic zones that produce toxins (H_2S, methane) and encourage harmful molds.

Practice- Compost yard Fungus

Module 15 | Phase II (Equalization, Pasteurization, Conditioning) & Control Methods

- Key Phase II steps: Executing precise temperature curves to destroy pathogens and convert free ammonia into microbial protein.
- Equalization stage: Ensuring uniform heat distribution before pasteurization to eliminate dangerous cold spots.
- Pasteurization dynamics: Thermal and biological boundaries during peak heat treatment.
- Organoleptic readiness indicators: Visual, tactile, and aroma cues confirming absence of free ammonia.
- Squeeze Test: Practical moisture assessment technique before spawning.
- Ammonia measurements: Using Dräger tubes or digital sensors to verify safe ammonia concentration.

Module 16 | Course Review

- Comprehensive synthesis: Reviewing critical control points across all production phases to consolidate operational knowledge for each farm's scale.
- Certificates & diplomas: Official award ceremony confirming successful completion of the professional course.

UMDIS
mushroom
agency

TRAINER

BUTTON MUSHROOM GROWING COURSE

20 years of experience in the mushroom business, working for two of the largest compost producers in Europe. He gained extensive expertise in customer technical support as well as in quality management. Since 2020, he has been running his own consulting company — Adfungi. Wojtek helps customers optimize their production according to dynamic market conditions, both in mushroom growing and compost production.



Wojtek Konieczny



UMDIS
mushroom
agency

ABOUT

FUNGUS S.C. PRODUKCJA I SPRZEDAŻ PIECZAREK

FUNGUS S.C. Produkcja i Sprzedaż Pieczarek is a commercial button mushroom farm with its own compost yard, located in Wioska, Poland (Wioska 2, 64-308 Wioska). The course takes place on site, so you can follow every stage of production on a working farm — from raw materials and composting through spawning, casing and cropping.

FUNGUS S.C. Produkcja i Sprzedaż Pieczarek



UMDIS
mushroom
agency



RESERVE YOUR SPOT

and start growing smarter

Course Pricing

Full 5-day course — **€1300**
Growing, Days 1-3 — **€1000**
Composting, Days 3-5 — **€1000**

Contact Information

Whatsapp
+44 7539 669222

Website
https://umdis.org

Address
FUNGUS S.C. Produkcja i Sprzedaż Pieczarek