SOLDIER FLY HUB

FLY INTO SUSTAINABILITY

BSF Industry Briefing: The China-West Connection

Featured Expert: Ruilong Zheng (Global insect protein expert / Founder of IPIC)

Source: Black Soldier Fly Leaders Podcast (Season 2, Episode 1)

Supplemental Data: SoldierFlyHub.com

Market Intelligence (By the Numbers)

- **China Market Scale:** Over 1,000+ BSF companies are currently active in China.
- **Projected Growth (2026):** Estimated 20–25% increase in Chinese BSF production, driven by fishmeal shortages and the search for protein security.
- **Feedstock Shifts:** Traditional subsidies for catering waste are vanishing. In competitive regions, BSF operators now pay up to €40/ton for high-quality catering waste.
- **The "80°C Standard":** Leading Chinese factories pre-process waste at 80°C to stabilize nutrients and extract oil (sold as biodiesel) before larval rearing.

Technical Innovations & "Gaps"

The Chinese model is built on **"Automated Manual Logic"**—optimizing high-yield manual techniques with low-cost industrial robotics.

Feature	The Chinese Approach (e.g., Wayan Shing)	The Western Approach (e.g., Protix/Innova)
Cooling	Extensive use of Groundwater Heat Exchange.	High-energy HVAC & Air Conditioning.
Material	Stainless Steel & Iron (Resistant to heat/cleaning).	Heavy use of Industrial Plastics.

Moisture	Mesh-bottom crates for passive liquid drainage.	Dry fiber additives to balance slurry texture.
Philosophy	"The Pit Farm" – Concrete, sturdy, low-Capex.	"The Smart Factory" – High-tech, VC-funded.

Key Players to Watch

- **Weilanzing:** The "Government Model." Processes 130 tons/day of catering waste with zero "stop-overs" since Oct 2023.
- **Unique Guangzhou (BSF Eggs):** The global leader in BSF egg supply. Currently looking for international partners to scale "Egg Hubs."
- **Inspro (Elvis Yu):** A leader in crate-based automation based in the tech-hub of Shenzhen.
- **Xingmei:** A primary exporter of BSF technology solutions, currently building sites in Nigeria and Mexico.

Strategic Takeaways for Investors & Operators

- **The Texture Trap:** Larvae escape (crawl out) primarily due to surface moisture. Managing the "Viscosity" of the substrate is more critical for yield than nutrient density alone.
- **Density vs. Heat:** High rearing density is a double-edged sword. While it saves space, the cost of cooling the biological heat often outweighs the land-saving benefits.
- **Circular Revenue:** Profitable Chinese sites aren't just selling larvae; they are integrated energy plants producing Biodiesel (from pre-wash) and Bio-Gas (from wastewater).

Want to see the diagrams?

We have created 3 technical visual guides (**Mesh-Bottom Physics**, **Pit-Farm Evolution**, and the **Weilanzing Flowchart**) along with 3 core industrial pillars to accompany this briefing.

Access the blog and visuals at: SoldierFlyHub.com/The-Great-Wall-of-BSF
