



Wolffia Globosa

Client Request: “อยากให้วิเคราะห์ ธุรกิจ “ไข่ผ่า” ความน่าสนใจในธุรกิจ ปัญหา อุปสรรค / อนาคต / ค่าตอบแทนของธุรกิจ”

My English Translation: Please analyze the business potential for Wolffia Globosa, including Challenges, the Future of “ไข่ผ่า”, and ROI on “ไข่ผ่า” or Wolffia Globosa Investments

Scope of Work: 8-10hrs

Deadline: Fri, 27 Jan

Remuneration: ฿3,500

Reporting Language: English

Reporting Deliverable(s): Notion > Jupyter > Exported to PDF

What is ไข่ผ่า

ไข่ผ่า Business Analytics

The Data

Spreadsheets (link).

Charts & Graphs

Business Potential



Jupyter Notebook

What is ไข่ฟ้า

ไข่ฟ้า has a scientific name, Wolffia Globosa.

Wolffia Globosa is the world's smallest flowering plant, that is highly nutritious, packed with **35–45% protein, essential amino acids, iron, and vitamin B12**

Street Name: "Green Caviar" or "คาวีเขียว"

Superfood Potential

Unprocessed

Can be eaten, but in risk of water-borne contamination

Processed

Dried/Powdered

Processing Techniques: Freeze-drying, Milling

Processed, it can enhance Wolffia Globosa's digestibility and potentially bioavailability

For Business, Processed is absolutely the way to go. It improves the quality of the superfood regarding human digestibility and (potentially) nutrient absorption rate, preserves shelf-life, potential for value-added revenue and marketing/branding markups.

ໄຟຟ້າ Business Analytics

Questions:

1. How popular is ໄຟຟ້າ in the world today as a supplemental superfood?
 - a. Metric: Tonnes consumed per year
 - b. Reference Metric: Tonnes of Rice and Maize (Corn) consumed per year
2. Where is ໄຟຟ້າ naturally found on Earth?
3. How big of an Industry is ໄຟຟ້າ as of Jan, 2026 in Thailand (consumption and export)?
4. Which countries do Thailand export Wolffia Globosa to the most?

Answers

1. ໄຟຟ້າ is way too niche of a cereal to have large datasets regarding its global consumption rates per year. However, production initiatives in Thailand are heading towards producing **tens-thousands** tonnes per year.
 - a. Reference: Global Rice Production: ~500 million tonnes per year
 - b. Reference: Gloval Corn Production: ~1.2 billion tonnes per year
2. ໄຟຟ້າ is naturally found in **Asian Tropical and Subtropical** regions of the world, including Thailand, China, India, Japan, Korea, Vietnam
3. "ໄຟຟ້າ" is an active, rapidly growing niche industry — not yet large in absolute tonnage or export value, but moving fast through R&D, standards, and pilot commercialisation.
4. Aspirational countries Thai producers want to export to:
Japan — strong buyer interest and planned production/export tie-ups (Japanese firms seeking Thai production bases).

Middle East (UAE, Saudi Arabia, Bahrain) — cited as target markets; some producers are seeking halal certification to access these markets.

EU / Germany — Thai Wolffia was exhibited at European trade events (International Green Week / trade fairs) as part of export promotion.

Other Asia / plant-protein markets — specialist buyers in Korea, Singapore, and broader Asia show interest through trade fairs and ingredient sourcing channels.

The Data

The Story I want to tell:

Wolffia Globosa or ໄມ້ຟ້າ is a very competitive superfood with tremendous potential for the saturated Superfood and Supplements market. As naturally found, it is a commodity, but processing, packaging, branding and storytelling will determine its true profitability and global reach. There is a strong case to be made that there isn't a widely-active Wolffia Globosa market as of yet, demand will need to be cultivated. However, it can neatly fit into a pre-existing Superfood and Supplements market/company/offering/package-deal. For example, it can be bundled with Omega-3 and Multivitamins, or it can be blended into a daily Multivitamin supplement. It's strength is that it is inherently nutritious, minimal processing is required to yield its full health benefits. This makes Wolffia Globosa an organic-leaning supplement, perfect for superfood blends. Superfood blends can come in the form of water-soluble sachets, tablets, or different size tubs of dry powder. Regarding which superfoods are ideal to blend the Wolffia Globosa or ໄມ້ຟ້າ with is outside of my scope of expertise.

Things I want to quantify:

(from GPT)

- **Nutritional density vs other superfoods (protein %, micronutrients)**
- **Growth efficiency (yield per hectare/rai, doubling time)**
 - *Seasonal Dependancy/(potential) Resilience (indoor vs outdoor, Winter/Summer/Rainy)*
- **Market presence (export volumes, number of products globally)**
- **Processing complexity (cost per kg dried powder)**
 - *Consumer adoption proxies (Google Trends, supplement SKU counts)*
 - *Competitive landscape (spirulina market size vs Wolffia market size)*