### Ags■Al User Guide

A complete, non technical guide for running, understanding, and sharing Ags Al.

#### 1) What Ags■Al Is

Ags
Al reads your soil and leaf test results and compares them with MPOB standards, highlighting gaps and generating a PDF report.

#### 2) What You Can Do

- Upload soil/leaf data
- See Nutrient Gap Analysis (Critical  $\rightarrow$  Low  $\rightarrow$  Balanced)
- Export a matching PDF

#### 3) Requirements

- Windows 10/11, Python 3.10+, browser

### 4) Quickstart

- 1. `python -m venv .venv`
- 2. `.\.venv\\Scripts\\activate`
- 3. 'pip install -r requirements.txt'
- 4. Copy `.streamlit/secrets.example.toml` to `.streamlit/secrets.toml`
- 5. `streamlit run app.py`  $\rightarrow$  open `http://localhost:8501`

## 5) Uploading Data

Use the Upload page; examples are in `json/`.

## 6) Reading Results

Severity by absolute percent gap:

- Balanced ≤ 5%
- Low 5-15%
- Critical > 15%

# 7) Exporting PDF

Use the export option; PDF matches the on screen tables.

## 8) Configuration

```
Edit `.streamlit/secrets.toml`. Minimal local:

[app]
environment = "production"

log_level = "INFO"

...
```

# 9) Deployment Options

- Local Windows
- Streamlit Cloud
- Docker

## 10) Troubleshooting

- Update pip if install fails: 'pip install -U pip'
- Try sample files in `json/` to validate

# 11) Where Things Live

- Start: `app.py`
- Results tables: `modules/results.py`
- PDF: `utils/pdf\_utils.py`
- Engine: `utils/analysis\_engine.py`
- Config: `.streamlit/secrets.toml`