

# AZOLLA KHAWI DAN

## Thuhmahruai

*Azollahi* katchat chi khat, tui a lang chi a ni a, an tetemavanghianpatêkpawh an angzawkmah a, tuitlinnahmun ah hmuhtur a awmfo thin. *Azollahi* hnimhringtetakte, zangdeuhlehtui a langthei an ni, an pungchakin an awmnamun hi hunrei lo te ah an zamkhatthei thin a ni. *Azollahianleitha (Nitrogen)* ama tan ainsiamtheihavangin, a hranpa a *nitrogen* a chawm a ngaive lo a ni.

### Azollakhawi nan a thilpawimawhte

Boruaksiklehsa : 20°C -32°C  
Eng : Ni eng 50%  
Boruakhnawmzawng : 65-80%  
Tui (tuikhuaptlin) : 5-15 cm  
Tuithur/alna (pH) : 4-7.5

*Azollain* a mamawhawmtheichuphosphorus a ni a, SSP tlemtepekhian an pungchakemem a ni.

### Azollatih pun dan

*Azollatih* pun nan hiantuikhuah/tuitlinnahmun a tuichim chin hi 15cm (½ feet ) vel a sang tur a ni. Tuikhuahlehleiletbuhkar ah tepawhthatak in an pungtheihbawk.

### Siklehsa

*Azollahi* Mizoram chhunchmunzawngzawng ah khawitheih a ni a, boruaksiklehsa 20°C atanga 32°C hi *Azolla* pun nan duhthusam a ni.

### Eng

*Azollahi* hmundaihlim lam deuh ah hiananpungchak in an hrisel a, leiletbuhhmun ah te dah hianbuhhlimhnuai ah thatak in an pung thin a ni.

### Soil pH

*Azollahi* lei thurleh al (pH) 5.2 atanga 5.8 ah hian an pungchakbik a, hemi avanghianMizoramahuartak a hmantheihani.

### Azollakhawilai a hriatturthenkhatte

1. *Azolla* hilensuah a sengtheihnise atha
2. Tui hi 25°C ai in sa lo se duhthusam a ni.
3. Ni salutukdannan shade net, di, dap etc a hmantheihbawk.

4. *Azollahi* a pun chakemavanginhmunaawhkhathma a, ni tin sengtheihnise a tha.

### Azollaa nutrient pawimawhawmte

*Azollahianheng* a hnuai a nutrient pawimawhtaktak, thlaileh ran in an mamawhte hi a awm -

Sl. no	Nutrients	Composition
1	Nitrogen	5.0%
2	Phosphorus	0.5%
3	Potassium	2.0-4.5%
4	Calcium	0.1-1.0%
5	Magnesium	0.65%
6	Manganese	0.16%
7	Iron	0.26%
8	Crude fat	3.0-3.3%
9	Sugar	3.4-3.5%
10	Starch	6.5%
11	Chlorophyll	0.34-0.55%
12	Ash	10.0%

### Azollahmannate -

#### Biofertilizeratan

*Azollahi* kum sang tam takkal ta atangtawh khan leiletbuh ah hian chin pawlh thin a nitawh a. *Azollahianboruak* a awm*nitrogen* hi a lo fawmkhawmthei a, churangchuanleithaata npawhhiantangkaitak a ni. Buhnen a chin pawlhhianhlo dang to tur tam tak a lo dip vetheibawk a ni. *Azollahi* tundinhmun ah hian South-East Asia hmun tam tak ah biofertilizeratanhianh manmek a ni a, leilet a buhphunzawhnhurei lo te ah *Azollahi*



leilettuitling ah hianchhuah thin a ni. *Azollahianhlo* lo to turte a dip thi thin a, henghlote hi a lo tawihhianleithabuh in a mamawhtur a lo siamve thin a ni.

### A tangkainate

1. *Azollahring* 10 -12 ton/hectare a hmanhian lei a *Nitrogenawm* 50-60 kg/hectare in a tipung a, nitrogen fertilizer (Urea, DAP etc) hman hi 30-35kg/hectare in a titem.
2. *Azollahmanhianbuhthar* hi 20-30% in a ti tam. Buh chi thenkhat DR-92, RCPL-1-87-8, Mendri, H-2850 leh Manipur ah *Azollahmanhian* (leitha dang ring lovin) 30quintal/hectare a thartheihtihhmuhchhuah a nibawk.
3. *Azollahiantuichunglangzawngzawng* hi a chimkhahthrinavanghian, hlo dang to tur a awmtheingailova, hemi avanghianloneitu tam tak a puitheibawk a ni.
4. *Azollahiantuichunglangzawngzawng* a chimkhahthrinavangintuihuralmaitur a titem in buh in tuianmamawhna a titemsaawtbawk.

### Ran chaw atan

*Azollahian* ran chaw thatak - proteins, amino acids, Vitamin A leh B<sub>12</sub>, beta growth promoters, calcium, phosphorus, potassium, ferro- magnesium lehtil dang tam tak a pai a ni. Mithiam ten *Azollahi* ran chaw dang nenkhaikhin in bawngnutetui a ti tam theihtih an hmuhchhuah a, Broiler leh Layer tuitepawhengemawzat in an rihphah in an tam phahbawk a ni. *Dry Azolla flakes* hi Ar chaw atantehman a ni a, *Azollahring* hi sangha chaw atanpawhman a ni thin.

*Azollahian* protein (25-35%), minerals (10-15%), leh chaw tha dang tam tak a paiavanghian ran chaw pangngai a lo tlemchuaanaai ah hmantheih a ni. Ran tepawhhianazolla hi awlsamtakin an paitawihtheibawk.

**Azollakhawidante**  
**Tank method**



Cement tanky, 3x3x20 feet siam hi duhthusam a ni a, hmun a remchandan a zir in heiai a zimtepawh in siamtheih a ni. Lei chunglang hang hi hemi tankychhungahhian 1ft vel a sang in dah tur a ni a, chumihnu ah tui 1 ftvel a sang in dah tur a ni. *Azolla* hi tlem hemi tuichungahhianchhuahtur a ni a, kar 2 vellekhnuahchuanni tin sengtheih an ni thin.

**Silpauline lined pit method**

A siamnahmuntur hi uluktak a thlawhfaihnuahualremtak a mam (level) tur a ni a. Khur (3x3x20 feet) hemi ah hianlaihtur a ni. Silpauline hi phahhnuah, lei chunglang hang hi hemi khurchhungahhian 1ft vel a sang in dah tur a ni a, chumihnu ah tui 1 ftvel a sang in dah tur a ni. *Azolla* tlem hemi tuichungahhianchhuahtur a ni a, kar 2 vellekhnuahchuanni tin 1 kg sengtheihanni thin.



**Brick cornered bed method**

Hetianga *Azollakhawina* ah hi chuan lei laihkhuarkher a ngailova, brick hi rem hualmaitur a ni. 3x10 feet angazauvel in brick hi rem a ni a, a san zawng hi 1 ftvelangaduan thin a ni. Silpauline hi phah a nihhnuah tui hi chhunluhtur a ni a, hemi ah hian *Azolla* hi chhuahtur a ni. Kar 2 vellekhnuahchuanni tin sengtur a lo awmtawh thin.



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