

Editor-in-chief

Dr. Saingura Sailo
Director
A.H & Vety Department

*Editorial Board :**Editor*

Dr. R. Lalmalsawmi
Deputy Director (VE)
A.H & Vety Department

Jt. Editor

Dr. Robert Rualthankhuma
Vety Officer (Planning)
A.H & Vety Department

Cir. Managers

Lalthavunga Ralte
Lalrinawma
Information Wing
A.H & Vety Department

Printed at

Zomi Computer & Paper
Works
Tuikual 'A'
Below Vanapa Hall
Aizawl, Mizoram
Ph - 9862660318

Editorial

**Ranvulh dawna hriattur
pawimawhte**

*Dr Malsawmkima¹ & Dr.
C.Lalawmpuia²*

*1-Teaching Associate, College
of Vety. Sciences & A.H.,
Nagaland, C.A.U. (I)
2-M.V.Sc, Veterinary Public
Health and Epidemiology*

**Dinhmun harsa zawkten hlawk
taka an vulh theih tur Ar chi tha -
Vanaraja**

*- Dr. Lalhruaipuii,
Dr. Lalthansanga Khiangte
Dr. Lalrempuii*

Rulhut hlo pek pawimawhna

*By:Dr.K.Lalbiaknungi, MVSc
(VPara) V.O., Vety. Polyclinic
Hospital, Aizawl*

Keimahni :

Editorial :

Ran vulha tui mite leh ran vulh lama kan ram ti hmasawn tura thawkte in ral thlir mai lova kan in kuangkua hnaih leh zual a tul ani. Hmanlai tihdan vuan tlat chung tunlai huna kal tum hi hmasawna daltu ani thei. Tha taka chhawm zel chi a awm laiin tunlai thiamna thlak ngai tam tak a awm bawk. Ran vulh chungchang ani emaw thildangah pawh thiamna chhawr nachang kan hriat a tul ani, kan ramah ran vulh farm din hluai a beidawng leh ta sawi tur tam tak an awm, chung mite chuan ran vulh hi eizawna tlak lovah an chhuah chawk. Han bihchian chuan farm din dawn leh a enkawl chhoh dan ah a zir mite rawn lova mahni idea a ti an lo ni thin. Ram changkang zawk chu sawi loh India ramah ngei pawh hian ran vulhna farm lian tak tak engemawzat a awm a, chung te chuan Vety doctor an chhawr thei lo anih pawhin regular taka an farm enpui turin Veterinary Consultant an ruai thin, kan ramah ranvulh farm din kan la tlem hle a, a remchan anga mahni in bul leh huan a ran vulh mai thin kan ni. Kan ran vulh tam lo mahse chhungkaw tam tak tan in chhung bungrua pawimawh tuak na leh naupang school kalna senso tuak nan kan hmang tangkai hle, mi rethei tan phei chuan sum hlawm kan neih ve theihna hnar pawimawh tak anih avangin kan ran vulh hi a hlu ani. Kan ran vulh te an thatna tur anih phawt chuan mi thiam kan rawn hmasak hi kan tih makmawh ani. Ran vulh tute leh Department thawh hona avangin kan ran vulh ah hmasawna a thleng thei ani.

RANVULH DAWNA HRIATTUR PAWIMAWH TE

Dr Malsawmkima¹ & Dr. C.Lalawmpuia²

**1-Teaching Associate, College of Vety. Sciences & A.H.,
Nagaland, C.A.U. (I)**

2-M.V.Sc, Veterinary Public Health and Epidemiology

Kan ranvulh te hi eitur sa (meat) min petu anih bakah mi tam tak tana eizawna petu anih avang in an pawimawh em em a, ranvulh pawh hi kan la uar sauh sauh in, a sa pawh kan la ei dawn chauh niin alang. Thufingin ‘A bul tan that chu a zatve zo ang’ a tih angin, ran kan vulh dawna hriattur pawimawh deuh deuh, a bikin Broiler leh Vawk Farm siam dawna hriattur te ilo sawi dawn teh ang.

1. A hmun (location) thlan dan. Farm hlawhtinna hi a awmna hmun hian a hril thui hle a. Duhtusamah chun tunhma lama ran leh ar la vulh miahlohna hmun ni thei se. Ran leh ar lo vulh tawhna a nih chuan natna hrik lo Chambang te a awm palh thei a, awlsam takin natna a darh thei a ni. Chuti nilo a lo vulh tawhna hmuna kan tan dawn a nih chuan a hmun chu uluk taka natna hrik te tihlum thei tura sawngbawl (Disinfection) tur a ni. Kan farm siamna tur hmun chu mihring chenna hnaih takah a ni tur ani lo. Mihring chenna a hnaih viau chuan abul hnaia awm te tan rimchhia a ni thei a, mihring leh ran tena in kaichhawn tawn theih natna (zoonotic disease) heng bird flu te, swine flu te a awm phah thei a ni. Kan farm

awmnaah chuan kawlpheha, electric leh tui thianglim mamawh tawk a awm tur a ni bawk. A bikin vawkte hian an taksa tidai tura an thlan ve vak theihloh avangin leh an taksaah thau atam avangin khawlum tuar an zuau in heat stress kan tih te an nei duh em em a, nipui khaw lum hunah pheih chuan an taksa sa lutuk ti dai tur a tuia leih huh an ngai fo thin a ni.

Kan farm siamna tur hmun chu kawngpui tha takin a pawh tur a ni a. In kal pawhna a that tawk loh chuan bungraw mamawh lak luh leh lak chhuah hunah chet vel a ti harsain, pawisa tam tak kan sen ral phah thei a, kan hlawkna tur tam tak kan paihral thin a ni. Kan farm siamna tur hmun chu a bulvela ran chaw chin theihna ni theise. Abikin vawk chaw a kan pek theih heng dawl, changel,

kawlbahra emaw te a awm theih chuan a chaw mana kan sen tur tam tak kan hlep thei dawn a ni. Tin, vawk leh broiler vulh hi sangha khawi nen hian a inmil em em a ni tih hi lo hre tel bawk ilah. Hemi chungchang bik hi chu kan farm awm dan leh kan sangha khawi tur a zirin mithiam zawk te chik zawka rawn mai ni se.

2. A in sakdan (Housing) chungchang.

Ran in sak dan tur hi sik leh sa awmdan hian a hrilthui hle a. Vawk leh ar te hi extreme weather kan tih khawlum lutuk emaw khaw vawt lutuk emaw ah hian an than a tha theilo a. Chuvangin heng nisa, ruah leh thli na lutuk laka venghim tur hian a insak pawh kan uluk tur a ni. Tropical ram lum India ram angah chuan a in hi khawchhak leh khawthlang

(East to West) dung zuia sak hi mithiam zawk tena an thurawn a ni a. Hemi dung zuia in kan sak chuan chhun nizat zual hunah, ni hian in chunglamah a chhunber a, a bang lam atanga nisa lut tur tam tak a veng a, nieng mamawh tawk hmu tho siin ran ten an thatpui zawk a ni. Kan ram awm dan in alo zirlo deuh anih pawhin a in sak hunah a theih angah siam rem kan tum dawn nia.

Vawk leh ar te hian boruak thianghlim tam tawk an mamawh reng a. Chuvangin a in sak hunah pawh boruak luh leh chhuah zung zungna tur ventilation tha tak kan siam tur a ni. Ranin chhuat zawl atanga feet 4/5 vel chunglam hi chu pinphui tur anilo a. Rukru emaw ransa zawhte angte an luh theihloh nan rinawm taka len emaw zar mai theih a ni.

Ar in chhung boruak hnawn dan hi ngaih pawimawh angai hle bawk. A hnawn lutuk chuan hmuar (fungus) kan tih te an to in, natna hrikte an inthlahpung awlsam phah a, a ro lutuk leh thung chuan vaivut khu, dust particles, an lo awmin an thawkna lamah te harsatna a thlen thei a ni.

Kan vawk leh ar in te chu duhthusam ah chuan lei chhuat zawl kan tih, ground level, aia sang a sak tur ani. Hei hian ran zun leh tuichhe tling thei mai bakah, ruahsur hunah te tui tlinglo a a luan hul zung zung nan a tanpui a, rannung lam sazu emaw rul ang chi te lut tur pawh a veng bawk a ni.

Hmun (space) an mamawh zat lo sawi dawn ilah. Broiler puitling hian tha taka thang turin feet 1 bial vel hi an mamawh tawka ngaih a ni a.

Chumi awmzia chu in feet 100 bial, a dung feet 20, a vang feet 5 ah hian broiler puitling 100 kan vulh thei tihna a nih chu. Kan ar in chhuat ah phuai (litter material) kan tih angte kan hmang a nih chuan, a khawn un thlenga dah tur a nilo a, a khat tawka leh phut ve reng bakah a tharin emaw thlak ve reng tur a ni. Hei hian natna hrik piang tur aven bakah ar zun leh ek atanga boruak chhia in siam te kal ral zung zung nan a tanpui bawka ni.

Vawk ah chuan vawkpui, no nei maitur inah a note dahna hisap telin hmun mamawh zat chu meter 8 bial vel a ni a, vawkpa chi thlahtu ah chuan meter 7 bial vel niin, vawk talhtur bik hoah chuan meter 2 bial bawr vel a tawka ni. A in kan sak lai atangin an chaw eina leh tui inna in daihtawka tur kan hisap nghal

tur a ni. An chaw in chuh vel avangin an mahni an in tih hliam theih mai bakah an chaw an tibua in a riral phah mai mai thei a, kan ngai pawimawh tur a ni. Vawk bikah pheih chuan kan khung ho a nih chuan an chaw kuangah daidanna siam ngei tur a ni. Kan ran vulh te chu a in rual khat ang zela dah tur ani a, a lian leh te emaw a nopang leh upa emaw khung ho tur a ni lo. Vawkpa til lakloh leh a nu te chu thla li an tlin tawh chuan dah fin tur an ni tawh lo. Hetianga dah hran hian enkawl an awlsam mai piaah lamah natna inkai tur thleng in aven phah thei a ni.

Eng (Light) an mamawh dan :

Broiler te hian eng an mamawhna asang hle a, nileng zankhua a a in tih en theih chuh thusam a ni. Zan lama a in (building) pumpui tih en hrim hrim nan chuan feet 200 bialah

electric bulb watt 60 hi tawka ngaih a ni. An tetlai phei chuan up lumna siama, an mahni ti lum tura electric bulb emaw dah a ngai thin. Kan electric bulb khaina bula an awmkhawm tuai chuan a vawt an ti tihna a ni a, lum an chan kim theih nan bulb dah belh mai tur a ni. Chutih rualin bulb bula awmlo a an darh sarh sung chuan a lum an ti ani thei a, electric bulb chu off rih mai emaw, kan khaina chin tihsan mai tur a ni. Broiler note te hian kar khat naah chuan lum 95^o F an mamawh a, chumi bak ah chuan a kar rukna thlengin, kar tin in 5^o F ah tih hniam zel tur a ni. Chumi awmzia chu an upat chhoh ang zelin a in kan tihlumna kha tih hniam ve zel tur tihna a nih chu.

Vawk te erawh chuan ar ang em chuan eng an mamawh ve lo a. Vawkpui in tur erawh chu engtik hunah pawh nau

neih theih a nih avangin electric tha taka fit tur a ni. A note dahna tur ah chuan an taksa tilum turin awlsam taka electric bulb fit mai theih a siam tur a ni bawk.

Thianghlimna (Hygiene) chungchang: Kan farm building ah te chuan thianghlimna (hygiene) kan ngai pawimawh em em tur a ni. Ran in chhung lut leh chhuak te tan ke chiah thianghlimna kawngkhar bul tinah thuklo te inches 2/1 velin kan siam tur a ni a. Hei hian natna hrik darh tur te a veng a ni. Ran in a lut leh chhuak tur te chuan ke lawnga lut loin pheikhawk, gum boot ang chi emaw bun theih ni se. Tin, kan vawk leh ar dahna bikah chuan a duh leh hman a piang luhtir mai mai loin a thawk a te chauh luhchhuah thin tur a ni. Natna hrik te hi an mahni ran leh ran inkar mai bakah mihring te

hian kan put darh ve theih avangin fimkhur hle tur a ni bawk.

Kan ranin te bakah a thawktu awmna tur leh ran chaw dah khawlna tur te tha taka sak tur a ni a. Heng sazu, zawhte leh a dangte hian an zun leh ek atang in natna an theh darh theih avangin kan chaw dah khawlnaah te an luh loh nan phui taka siam tur a ni. Tin kan ran vulh te chu damlo thei an ni a, hetiang huna hman tur ran damlo bik dahna kan siam tur a ni bawk. Ran kan la thar anih pawhin a wmsa te nen dah fin nghal mailo vin natna an neilo ngei ani tih chian nan kar 2/1 chhung chu khung hran (quarantine) phawt tur a ni.

3. Record keeping chungchang.

Eng farm pawh kan siam dawn anih chuan record

keeping hi kan ngai pawimawh em em tur a ni. Record keeping kan tih chuan kan rante chanchin ziahna ti ila kan hre thiam mai awm e. Kan vawk leh ar te chu kan lakni te, vaccination kan pek nite, rulhut hlo kan pek hunte leh kan hralh nite kim chang takin kan chhin chhiah thin tur a ni. Chubakah a chaw mana kan senso emaw thil tul danga pawisa kan senna ang chi reng reng kimchang taka chhinchhiah tur a ni bawk. Hei hian kan farm chu a hlawk zawngin nge a hlauh zawngin a kal a, khawi berah hian nge in siam rem a tul dawn tih Chiang takin kan hre thei dawn a ni.

Heng a chungka kan sawi te bakah harsatna dang kan tawk emaw hriatthiamloh te kan nei a nih chuan mithiam zawk (veterinary doctor) te a tul angin kan rawn thin tur a ni.

**DINHMUN HARSA ZAWK TEN HLAWK TAKAAN VULH
THEIH TURAR CHI THA – VANARAJA**

**- Dr. Lalhruaipuii, Dr. Lalthansanga Khiangte &
Dr. Lalrempuii**

Ar vulh hi Mizoram mai ni lo India ram puma thingtlang miten chaw tha ei tur an neih reng theih nana thil pawimawh em em mai a ni a. A tlangpuiin thingtlang mite zingah zoar vulh an tam ber a, layer leh broiler vulh chu an tam lo hle a ni. Zoar kan tih te hi hlu hle mahse an tui tam lovin an lian lem lo hle a, chutih rualin layer leh broiler kan tih te pawh chaw tha tak pek a nih loh chuan an nih tur ang an ni pha lo fo thin a ni. Chu bakah ar pul hri leh hrileng hrang hrang an kai hma em em bawka. Hei hian ar vullhtute tan hlawkna aiin channa a thlen phah fo thin a; a enkawl nana an senso zozai te kha a thlawnin a ral mai thin a ni.

Indian Council of Agricultural Research (ICAR) chuan heng harsatna hrang hrang te hi hriain hma a la a. Hyderabad-a ICAR-Director of Poultry Research chuan India ram hmun hrang hrang, sik leh sa inang lo tak takah pawh hlawk taka vulh theih tur ar chi tha mi Vanaraja chu a lo siam chhuak ta a ni. Vanaraja ar that bikna tlem lo tarlang ila:

1) Sik leh sa thuah – khawi hmunah pawh a vulh pun theih.

2) Natna chi hrang hrang leh pul hri chi hrang hrang lakah a tuar a chhel bik.

3) Chawtha (concentrate feed) pek kher loh pawhin hlawk takin a vulh theih.

4) Zoar kan tih mai te ai hian a thang duang zawkin tui pawh a tui tam thei zawk.

5) A tui rawng hi a buang/uk a nih avangin a hralh vel a nuam.

6) A vulhna tura sum sen ngai a tlem.

Vanaraja vulh dan:

Vanaraja hi a tui ei/hralh atan (layer angin) emaw a sa ei atan (broiler angin) emaw a vulh theih ve ve a. Hmunhma neih dan azirin ar ina khung tlat (Intensive system) emaw zoar vulh anga tlat chhuahtir (Semi-intensive/free range system) emawin a vulh theih ve ve a. Layer anga kan vulh duh a nih chuan a ina khung tlat kher a ngai lo a, zoar vulh ang hian a tlatna tur hung thatin arpui 10-20 vel pawh vulh ila a tawk viau tura ngaih a ni. A tlatna tur hmunah hian ar ei tur hnim hring eng ilo a awm that danin vulh tam leh tlem thu a hril hle bawk. A sa ei/hralh atana kan vulh duh a nih chuan broiler vulh ang hian a in tur bik sak a, broiler chaw (Concentrate feed) hmanga chawmin a hlawk ber a ni.

A note enkawl dan:

Vanaraja hi hlawhtling taka vulh tur chuan a note hi

kar ruk a tlin hma chu uluk takin a note dahna tur bik (broiler/layer note enkawl dan angina) siam a enkawl a pawimawh hle. Parcel emaw plywood emaw hmangin ar note dahna tur sak mai tur a ni a, chhuat atan 2 – 4 cm vela chhahin phuai/buhpawl hman a tha. A tir kar khat chhung vel chu a chhuatphah phuai chungah chanchinbu hlui phah tur a ni. An ai lum turin electric bulb (arte pakhat tan Watt 2 zel hisapin) khaisak tur a ni. A lum nuam tawk hriat theihna awlsam ber chu electric bulb atanga an awmna hlat zawng atangin a ni a. A lum lutuk chuan a hlat thei ang berah awm an tum ang a, a vawt lutuk a nih chuan bulb bulah khan an inhawr tiau tiau thung ang. Chutiang ni lova, awm khawmna bik nei lem lova an darhsarh niaih chuan a lum nuam tawkah a ngaih theih. Engpawhnise, an upat dan azira an lumna mamawh dan han tarlang ta ila:

Arte upat lam	Temperature (°C)
Kar 1-na	32.2
Kar 2-na	29.4
Kar 3-na	26.7
Kar 4-na	23.9
Kar 5-na	21.1
Kar 6-na	21.1

Hriat reng atana pawimawh chu ar note lak hlimah a bawma dah tirh hian darkar hnih chhung chu chaw pek rih loh tur a ni a. Tui thianghlim (duhthusamah chuan electrolyte telh) chauh chhawpsakin an awmhmun tharah an tlangnel hun nghah phawt tur a ni.

Ar in sak dan:

Ar in hi mau, thing, polythene sheet etc. hmangin hautak lo takin sak mai tur a ni a. Vulh duh dan azirin a sak dan tur hrang hrang a awm thei ang. Amaherawhchu, ar thang duang tak leh tui hnem taka vulh tur chuan a thawl nuam tawka an awm a ngai a. A chhuat zau zawng tur tlangpui i han tarlang leh teh ang:

Ar upat zawng (chawlhkar)	Chhuat zau zawng (Sq.ft)	Chawthleng zau zawng (cm)	Tui pekna zau zawng (cm)
0-4	0.5	2.5	1.5
4-8	1	5	2
8-12	2	6.5	2.5

Ar dah hmaa a in buatsaih dan:

Ar in chu thianglim taka dah tur a ni. Lak sawn theih chi te chu uluk taka silfai hnuah disinfectant hmanga chiah a, tuisikin fai taka tleuh leh hnuah nisaa pho ro var tur a ni. Ar in chhunga maimawm ril leh bawlhhlawh te fai taka phiah tur a ni. Ar in chu rannung thahna hlo (insecticide) hmanga kah dap tur a ni. A chhuat leh bang te chu chinai hnawih tur a ni a, hei hian natna hrik lakah thui tak a veng.

A chhuatphah enkawl dan:

A chhuatah phuai/buhpawl kan phah a nih chuan a ro that leh that loh endik fo tur a ni. Ar puitling tan chuan a chhuatphah chhah zawng hi 5 – 10 cm a ni tur a ni a, nitin uluk taka chawh let tur a ni. A chhuatphah hi a hnawng duh em em a, a hnawn hian natna hrik tan awmhmun khuar a inthlahpunna remchang tak a siam thin. Chuvangin a lo, a hnawng/huh nasat phei chuan chinai phul emaw a thara thlak emaw ngei ngei tur a ni.

A chaw pek dan:

Ar note bawma an awm lai hian Pre-starter leh Starter feed pek tur a ni a. Vawi khata pek vak ai chuan tlem deuh zawk leh zing zawka pek mai tur a ni. Tin, a chaw hlui lutuk, thla khat aia rei dahthat tawh chu pek loh a tha. A chaw hmuar emaw, rannungin a lo bawm tawh ang chi te phei chu pek loh tawp tur a ni.

Kar ruk a pelh hnu chuan a chungka kan sawi ang khian zo ar vulh anga tlat chhuahtirin anmahnia chaw inzawn chawptir emaw broiler anga hralh hun thlenga vulh tur a ni. Tlat chhuahtir tur chuan zana an riahna tur ar chhiar siam a, zingah chhuahtirin tlaiah lawi mai tur a ni. A tlangpuiin arpui te chu tlat chhuahtirin duh huna artui tih keu leh atan arpui sawm zelah arpa pahnih emaw vulh tel a tha. An tlatna hmuna chaw awm dan azirin concentrate feed pek tel kher loh pawhin tam tak a tui thei tho a ni. Ar inah emaw a tlatna hmunah emaw tui

thianghlim nitin a thara pek ziah tur a ni bawk. A sa ei/hralh tur atan chuan arnu aiin arpa a hlawk zawk a ni.

A hriselna chungchang:

Vanaraja hi ar tuarchhel tak a ni kan tih tawh kha. Amaherawhchu, tihdam aia inven

a that zawk avangin a hun taka vaccine pek hi a him a, sum tam tak channa lakah min venghim thei a ni. Rulhut hlo pawh a dose dik takin thla hnih danah pek a tha. Vaccine hrang hrang pek dan leh a pek hun te chu:

Upat zawng	Vaccine hming	Strain	Dose	Route
Ni 1	Marek's Disease	HVT	0.20 ml	S/C injection
Ni 5	Newcastle Disease	Lasota	Far khat	Mitah
Ni 14	Infectious Bursal Disease	Georgia	Far khat	Kaah
Ni 21	Pox	Fowl pox	0.20 ml	IM/SC injection
Ni 28	Newcastle Disease	Lasota	Far khat	Mitah
Kar 9	Newcastle Disease	R2B	0.5 ml	S/C injection

Heng bakah hian natna emaw chiangkuan lohna emaw an lo nei a nih chuan mahnia enkawl mai lovin Vety doctor hnai berrawn tur a ni. Antibiotic ngat phe chu mahni thua pek miah loh tur a

ni; natnahrik hlauhawm zawk damdawi pawhin a ngam loh a lo pian phah thei.

Zoar vulh anga tlat chhuahtir hian Vanaraja lakah a hnuai ami ang hi kan beisei thei:

A nih phung hrang hrang tlangpui	Beisei ngam dan
Kar 10 chin hnuai lam thihna thlen dan	5% aia hniam
Kar 20 chin hnuai lam thihna thlen dan	10% aia hniam
Ar tui thei chin a niha thihna thlen dan	12% aia hniam
A tui tan theih hun	Ni 152
Kum khat chhunga a tui tam	171
Ar tui rawng	Uk/buang (Zo artui rawng ang)
Kar 40 china artui len/rih zawng	51 g

Hlawk taka Vanaraja vulh tura hriat tur pawimawh te:

- 1) Anmahni tina emaw tihlum emaw thei thil hrang hrang lakah an him tur a ni.
 - 2) Concentrate feed pek tel hlek theih chuan a tha leh zual
 - 3) Nitin tui thianghlim a tharin pek ziah tur
 - 4) Tawt lutuka an awm loh nan an hmunawl mamawh zat pek tur
 - 5) Ruhlut hlo leh hri danna (Vaccine) a hun taka pek tur
 - 6) Ar in leh a chhehvel tihthianghlim (disinfect) tur
- Hetianga Vanaraja vulh a nih chuan dinhmun harsa deuh tan pawh insengso mang lovin hlawk takin ar a vulh theih dawn a ni.

Hrechiang duh tan a hnuai tarlanah hian zawh fiah theih a ni.

Dr. Lalhruaipuii – Ph.no. 9612155176

RULHUT HLO PEK PAWIMAWH NA

By: Dr. K. LALBIAKNUNGI, MVSc (VPara)

V.O., Vety. Polyclinic Hospital, Aizawl

Deworming awmzia chu damdawi hmanga rulhut tih rem tihna a ni mai awm e. Worms kan tih hian ***Parasitic worms / Rulhut*** kan sawina a ni ber a, Parasite chuan midang ringa nung an ni. Veterinary Science ah chuan rulhut hi chi hrang hrang zir tham khawp a tam a nih avangin subject hrang hlak a dah a ni. Heng Rulhut te hi hlawm lian pathum ah then a ni a –

- 1) Rulhutpui (Cestode/Tapeworm)
- 2) Rulhutpui pheh (Trematode/Flat worm)
- 3) Rulhut mum (Nematode/Roundworm)

Heng rulhut te hi an pianphung a in an loh bawh in an hlauhawm dan pawh a in ang lo a ni.

Rulhut thenkhat chuan awmna tur dik tak (Definitive/ Final host) an thlen hma in thilnung dang (Intermediate host) ah an thang hmasa phawt thin a. Intermediate Host te chu chengkawl, chakai, kaikuang, sangha, hnapkhawn, sephung, fanghmir, uihli, chukchu, tuhrik, thosi leh thisen dawt chi tho te a ni thei. Heng thilnung te hi an awmluh chuan an inthlahchhawng zel thei lo a ni. Rulhut tam tak chu a tui (Egg) ei tel palh vang a pai

nghal theih a ni bawh. Heng Rulhut puitling te hi pum, ril, hrawk, mit (Gall bladder), lung, kal , chuap leh mit(eye) ah te thleng in an awm thei vek a ni. Ran pakhatin rulhut chi hrang hrang a pai kawp thei mai ni lovin an awmna hmun a zir in an hlauhawm dan leh taksa an tih chhiat dan pawh a inchen lo thei hle a ni. Ran upa aiin a nopang in rulhut a paiin a chhiatpui nasa zawk thin. Ranin rulhut a lo paiin thihpui nghal lemlo mahse natna dang an do theihna a tlak hniam theih mai bakah an taksa in nasa takin a chhiatpui thin a, an vun leh hmuh hralh tlak loh a awm fo

avangin a vulhtu tan hlohna nasa tak a thlen thin a ni.

Mizoten in tin deuh thaw a kan ranvulh lar ber pakhat chu vawk hi ani a. Vawk ah hian rulhut chi hrang 39 hmuhchhuah tawh ani a (Cestode – 3, Trematode – 12, Nematode – 24),heng zingah hian Mizoram a kan hmuh lar zual pahnih chu *Taenia solium* leh *Ascaris suum* te an ni.

Taenia solium hi rulhutpui lian ve tak, phek ani a chang neia inkhaichhawng diat chi a ni. Vawk ah he rulhut hi a puitling thei lo **va “Vawk Bawl”** (measly pork) kan tih hi ani. Vawk bawl sa chu eitur ani lova, heng bawl chhungah hian rulhutpui note lu (scolex) hliir a khat vek a ni. Vawk bawl sa ei atangin mihring in rulhutpui a pai thin a ni. He rulhut hi a puitlin chuan 8 metres thleng a sei te ani thei a, kum 25 thleng pawh a dam theih avangin a paitu mihringah harsatna nasa tak a thlen thin. Mihring chu he rulhut tan hian Intermediate leh Final host a ni kawp thei ani. Mizoram ah tunhma lam kha chuan pai sawitur an awm fo a, tunah erawh chuan

mihring kan khawsak dan alo thianghlim chhoh ve zel avang leh Vety Department hmalakna atanga mipui ten an rante rulhut hlo pek an lo ngaihpawimawh chhoh ve zel avangte in vawk bawl hi Mizoram a khaw kilkhawr takah lo chuan hmuh tur a awm ta meuh lo.

Ascaris suum hi rulhut lian mum ani a, tunlai kan vawk vulh ten an pai tam ber a ni. He rulhut tui (egg) hi lum leh vawt in a ti hlum mai thei lova, lei (soil) ah kum 5 lai pawh a dam thei a ni, a tui atanga puitling tur hian chhawng li a than angai thin (L1, L2, L3, L4). Vawkin he rulhut hi a pai tanna bul ber chu a tui(egg) in a tih bawlhhlawh ei leh in thianghlimlo atangin a ni a, vawk note hnute hne lai pawhin a pui taksa a rulhut tui lo bet a ei tel avang in a pai thei bawk. He rulhut tui hi pum chhung thur (Gastric juice) pawhin a tihlum thei lova, vawk in a ei hnu reilote ah ril a thleng thin a. Taksa tuihnang rualin thin leh lung a thleng leh a, chuap alo thlen chuan a keu a, a note (L3) chu chuap hmun hran

hran ah a vahkual hnuah hrawk ah chho in hrawk za leh khuh a siam a, vawkin a khuh chhuah a lem leh chiah khan rulhut note chu puitling tak tak turin ril lam a pan leh thin. Vawk kawchhung a paw khawih nasa ber tu chu rulhut note (Larvae) te an ni a, puitling tur a an thanna kawngah lung, thin leh chuap te hnathawk tha theilo khawp in a tichhe thin. Rulhut puitling chuan ril bangte a hlum nasat avangin vawkin chaw tha a taksa mamawh ang a lalut theilo thin a ni. Tin, an lo awm tam viau chuan ril pawh an hnawh phui thei bawk a ni.

Vawkin rulhut a pai chuan riltam mahse chaw a eitui lova, a thang theilo a, a vun a nung lova, a vun te chu lo thak in a vual chhuak a, a pum a lo puar a, a rihna nasa takin a tlahniam a, kawthalo leh thi te in a lo e a, a dawldang em em a, enkawl vat anih loh chuan a chau telh telh a, a thihpui thei bawk. Vawk thenkhat chuan rulhut te an e chhuak/luakchhuak bawk thin a, a then chu pai reng mahse an ek

(faecal sample) exam na atang chauh a hmuhchhuah te an awm. Vawk chu talh mai tur chi anih pawhin rulhut hlo vawikhawt tal a damchhung in pek ngei ngei tur a ni.

Engtin nge kan rante rulhut lakah kan dah fihlim ang?

(1) Heng rulhut te hi damdawi diktak leh dose diktak hmanga tihhlum theih an ni a. Damdawi hman lar zualte chu Albendazole, Fenbendazole, Closantel, Piperazine, Praziquantel, etc. Damdawi thenkhatte chu ran nopang lutuk a pek chi anih loh avangin mithiamte rawn zel a tha awm e.

(2) Ran in leh a vel te faitak a dah a pawimawh hle.

(3) Kan rante sa hel/satlaw eitur mai mai loh a him ber.

(4) Intermediate host te theihtawp a tihtlem emaw tih rem tum a tha.

(5) Ran enkawltute pawhin rulhut kan pai ve mai loh nan kan ei leh in tur leh hmanrua te fai taka sil thin tur a ni.

Deworming Schedule:

Ran chi hrang hrang Rulhut hlo pek dan tur hetiang hi a ni:

Species	Age at 1st deworming	Booster
VAWK	2 months	1) Every 2 months until maturity 2) Sows and gilts 7-14 days before farrowing 3) Gilts should also be treated 7-14 days before going to the boar / insemination
ZAWHTE	3 Weeks of age	1) Every 2 weeks till 3 months 2) Once a month from 3- 6 months 3) Twice a year
UI	2 weeks of age	1) Every 2 weeks till 3 months 2) Once a month from 3- 6 months 3) Twice a year
BAWNG / LAWI Roundworms	10 days old	1) Once a month till 6 months 2) Thrice a year after 6 months
Flatworms (liver fluke)		Twice a year (before and after monsoon)
Tapeworms		Twice a year (January and June)
KEL/BERAM A note-	2 months	Every 4-8 weeks until 1 year
No pailai		2 – 4 weeks before kidding/lambing
A pui/ A pa		4 – 6 times a year

Keimahni**INHLANTHARNA NEI**

AH & Vety Directorate Office chuan Dt 5th January 2018 khan AH & Vety Director Dr Saingura Sailo kaihruainain inhlantharna hun hman a ni.

Pony Riding Entertainment, A.H & Vety Farm, Thenzawl.

Ni. 20.1.2018 khan A.H & Vety Farm, Thenzawl a Pony Riding Entertainment chu Finance Minister, Pu Lalsawta'n a hawng a ,A.H & Vety Minister Pu C. Ngunlianchunga leh Department Officer engemawzatin he hun ah hian an tawiawm ani.

BRUCELLOSIS TRAINING

Dt. 8th February 2018 khan National Control Programme on Brucellosis hnuai ah Sensitization Workshop on Brucellosis chu Vety Polyclinic Conference Hall, Khatla ah neih a ni. He Workshop ah hian National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI) Bengaluru atangin National Control Programme on Brucellosis a Consultant leh Principal Scientist ni bawk Dr. (Mrs) Rajeshwari Shome lo kalin zirtirna a pe a. Mizoram hmun hrang hrang atangin DVO leh Veterinary Officer engemawzat in he hun hi an hmang.

Pilot Testing of 20th Livestock Census Software :

20th Livestock Census neih tur atana software enchhinna 21st February 2018 khan Mizoram ah neih a ni. Muthi leh Durtlang a ran nei in thenkhat ah enchhinna hi neih a ni. Govt of India atangin Mr. P.K.De, Adviser (Stats), Mr. Ajith Kumar N, Director (AHS) leh Mr. G. Janardhan, Scientist (NIC) te an lo kal.

MVSA GENERAL CONFERENCE 2018

Dt 16th March 2018 ni khan Convention Centre, Berawtlang Aizawl-ah 24th Annual General Conference an hmang a, member kal an tha hnemin Mizoram Vety Service Association member Chatuan ram pan ta te sunna hun leh Pension thlahna hunte hmangin, Pu C. Ngunlianchunga, AH & Vety Minister chu khuallian a ni. Dr. C. Vanlalramsanga, Secretary, Planning & Programme Implementation chuan ‘Workshop on NEDP and other Government policies relating to AH & Vety’ tih thupui hmangin paper presentation a nei bawk. Kum 2018-2020 chhung atana hruaitu thar thlanna an nei nghal, Hruaitu tharte chu:

President : Dr. Lalremliana
Vice President : Dr. C. Lalrintluanga
General Secretary : Dr. V. Lalzarzova
Secy i/c Organization : Dr. Robert Rualthankhuma
Secy i/c information
& Publicity : Dr. F. Laldawla
Secy i/c Finance : Dr. Esther Lalzoliani
Treasurer : Dr. K. Lalbiaknungi

IVA CONFERENCE 2018

Dt 17-3-2018 (Saturday) ni khan Selesih AH & Vety Rest House ah Indian Veterinary Association, Annual General Conference 2018 chu neih a ni a, hetah hian “*Workshop on Professional Efficiency Development*” tih thupui hmangin Workshop neih nghal ani a, Dr. R. Kapthuama chu Khuallian niin a hman pui.

Kum 2017-2019 IVA hruaitute chu :-

President : Dr. Daniel Chianghnuna
Vice President : Dr. Lalremliana
General Secretary: Dr. Robert Rualthankhuma
Asst.Secretary : Dr. C. Lalchhandama
Fin. Secretary : Dr. Kawlthanmawia
Treasurer : Dr. Zosangpuii

VETY DIPLOMA HOLDER ASSOCIATION

Dt.8th March 2018 ni khan Vety Diploma Holder Association, General Conference vawi 23-na chu Vety Polyclinic Hospital Conference Hall, Khatla ah neih a ni a, he hun hi AH & Vety Minister Pu C.Ngunlianchunga'n a hmanpui a, hruaitu thar thlanna leh Pension thlahna hun an hmang bawk.

2018-2020 chhung hruaitu te :

President : Lalthlamuana
Sr.Vice President : K.C Parmawia
Vice President : C. Thasiamia
Secretary : T. Zoramsiamia
Asst.secy : H.C. Lalhriatpuiia
Treasurer : R.Lalsangliana
Finance : Zosangzuala
Information Secy : Lalduhawma
Advisors : Dr. V.Lalzarzova, K.Hranghlira

INAPH TRAINING

Dt. 26th – 27th February 2018 khan Aizawl leh Kolasib District chhunga Doctor te leh Para Vets (AI Technician) te tan INAPH training neih a ni a. He hun ah hian NDDB atangin Dr. Satyapal Kurrey lo kalin training arawn pe.

He hun ah hian Animal Registration, AI, PD, Calving, Animal movement, Re-registration online hmanga tih dan chungchang in zirtima hun hman a ni.

ANIMAL FEED PLANT HAWNG

Dt 23-3-2018 khan Animal Feed Plant, Ran Chaw her na khawl thar Ramrikawna mi chu AH & Vety Minister Pu C Ngunlianchungan a hawng a, he khawl thar hian darkar khatah 8 metric ton ran chaw a her chhuak thei a ni.

VETY COUNCIL HRUAITU THAR

Kum 2018-2021 chhung atana Mizoram State Vety Council Member thar te :-

1. Dr. C. Sangnghina (Elected)
2. Dr. K. Rokhawla (Elected)
3. Dr. Robert Rualthankhuma (Elected)
4. Dr. MC. Lallianchhunga (Elected)
5. Dr. Saihlira (Nominated)
6. Dr. Vanlalenga (Nominated)
7. Dr. Lalbiakzuala Sailo (Nominated)
8. Director, AH & Vety (Ex-officio)
9. Dean, CVSC (Ex-officio)
10. President, MVSA (Ex-officio)

Transfer & Posting			
Sl. No	Name	Designation	Place of posting
1	Dr. Lalnuntluanga Colney	Joint Director (SZ)	Joint Director(P)
2	Dr. F. Vanlalruata	Manager PDF, Thenzawl	C.V.O, Tuipang
3	Dr. Lalrintluanga	V.O, Lungsen	C.V.O, Lawngtlai
4	Dr. K. Lalchhuanawma	C.V.O, Lawngtlai	G.M, Selesih

Muster Roll lak thar te :

1. Benjamin Colney, New Siaha
s/o Zirliana Colney
2. Vanlalchama, Pehlawn
s/o Nunringa
3. Lalrinnunga, Chaltlang, Aizawl
s/o H. Laldingliana

PENSION

1. Dr. Jasper Rongura Sailo, J.D (P) chu 31st January 2018 khan Superannuation in a pension a, Officers & Staff Welfare, Directorate te chuan Establishment section ah thlahna hun an hmanh.
2. Dr. K.Rokhawla, Addl Director(AH & DD), chu Ni 28.2.2018 khan Superannuation in a pension a, Officers & Staff Welfare, Directorate te chuan Establishment section ah thlahna hun an hmanh.
3. Pu R.Lalmuana. VS chu Ni 28.2.2018 khan Superannuation in a pension a, Officers & Staff Welfare, Directorate te chuan Establishment section ah thlahna hun an hmanh.

OBITUARY**DR.K.LALNITHANGA(1962-2018)**

Dr. K. Lalnithanga G.M, Selesih hi ni 12.12.1962 ah piangin, 13.9.1989 ah Veterinary Assistant Surgeon hna zawmin Saitual a post a, hemi hnu hian Vairengte, State Mini Zoo leh APO, Directorate AH & Vety ah te a awm a, Ni 26.9.2001 ah P.O, Feed Mill, Selesih ah promotion a hmu a, ni 24.11.2009 ah SDVO ah kaisang leh in Champhai ah a awm ani.

Ni 28.10.2016 Senior Grade ah kaisangin C.V.O, Tuipang ah post niin Directorate A.H & Vety ah attached a ni a, ni 2.8.2017 atanga a boral ni thleng hian General Manager, Selesih a thawk ani. Dr.K.Lalnithanga hi pa tha tak leh mahni hna ngaipawimawh mi a ni a, kum 28 chung zet sawrkarhna thawh chung hian rinawm tak leh taima taka thawk mi a ni a, Ni.28.1.2018 ah Chatuan ram min lo pan san ta ani.

R. LALNUNENGA VFA (1968-2018)

Kan then tak R.Lalnunenga(Valpuia) hi 1st April 1968 khan lo piangin 1992 ah School of Vety Science, Selesih-ah VFA training chhuakin 1993 khan Veterinary Field Assistant hna nghet hmuin AH & Vety Departmentah a lut a, a hna thar hi N,E. Bualpuiah a zawm a, Ni 26-4-2006 thleng khan Bualpuiah hian a awm, Ni 28-4-2006 khan Sihphir Veterinary Dispensary-ah transfer leh a ni a, May 2016 khan Sihphir Dispensary atang in Durtlang Veterinary Dispensary ah sawn ni leh in a boral ni thlengin Dutlang Dispensary-ah hian a thawk ani,

R.Lalnunenga (Valpuia) hi mi nun zawi leh inngaitlawm tak niin a hna thawhnaah pawh rinawm leh taima tak, hotu te thuawih leh zah thiam tak ani a, a ni ang kan chan ta hi Department chuan kan ui em em a ni.