



**Napier germplasm
at Jamkhar and
Khamdang Gewogs**

Pg 4



Ministry's Week

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Rabies Prevention and preparedness in Trashiyangtse

Chimi, Dzongkhag Veterinary Hospital, Trashiyangtse



the team has vaccinated 1500 dogs including pets

To prevent the outbreak of deadly diseases so called rabies, Dzongkhag Veterinary Hospital has been conducting rabies vaccination program with community animal birth control program annually in collaboration with National Center for Animal Health. Due to rabies outbreak at Trashigang last year, DVH has conducted mass vaccination campaign during Gomphu Cora festival to prevent incursion of

diseases during festival as there were large movement of public and stray dogs from outbreak zone. To create immune buffer as per the instruction from NCAH, the team has vaccinated 1500 dogs including pets (dogs and cats) covering the lower six geogs and town areas. With the fund support from NCAH, DVH could also perform sensitization and awareness program to all geogs involving Gups, Mangmes, Tshokpas and other

officials from nearby institutes.

The program was mainly to create awareness on the risk of rabies, symptoms, zoonotic importance, immediate reporting systems and its preventive measures. During the program DVH requested local government to allocate budget for sterilization and vaccination program

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Rabies Prevention and preparedness

in the geog as the increased community dog population is a social issue and local government should take lead role and technical backstopping will be rendered by DVH. The concern was highly regarded by geog officials and they promised to allocate budget from forthcoming year. Two days workshop on multi stakeholder field simulation and RRT formation was also organized by DVH involving officials from Health, BAFRA and livestock sector at Khamdang Geog conference hall to aware the collaborative support and action in rabies prevention and control measures. With strategic preventive measures, there wasn't any outbreak of rabies in Trashiyangtse Dzongkhag.

On 20th August 2017 community of Bringlum village under Khamdanggeog reported the suspected rabies case at Zangpozor near Kholongchu project's transient camp. The case was reported as drooling of saliva, droop down tail and dullness. Immediately Rapid Response Team was formed comprising VO, Livestock extension, Khamdanggeog, one staff from DVH and Tshokpa of the chewoog. The rabies suspected dog was observed

for a day for signs of rabies and rabies was ruled out as the dog has no significant signs except the hypersalivation which could be caused by many other disease conditions. Publics within the community were informed of the suspected case and to report immediately if there were any domestic animals exhibiting the symptoms of rabies or if there was sudden death of animals. The next day again the forest official at Zangpozor reported that there was another dog showing the same symptoms of hypersalivation. Again the team went for investigation as the case was infectious in nature. The team segregated those infected dogs from other community dogs in temporary enclosure made out of CGI sheet after parental administration of antibiotics and other supportive drugs. The dog was observed in the temporary shed for two weeks for signs of rabies and was release back to community.

The Dzongkhag Livestock Sector has limited budget for animal health as the pool of budgets has to be focused on dairy and poultry production to achieve the APA target. So to maintain dog population in the community and to prevent

rabies outbreak, Project proposal on mass sterilization and rabies vaccination campaign was proposed to Kholongchu Hydropower Limited. We are hoping that KHL would provide us budget for mass sterilization program.



Dogs impound for observation of rabies



Rabies sensitization and awareness to public

Rabies Facts

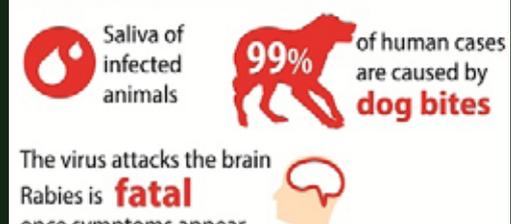
Rabies, with rare exception, is usually fatal. This virus travels from the bite wound location along the peripheral nerves to the brain. The animal does not appear sick during this time, called the incubation period. Once the virus reaches the brain, the animal quickly becomes symptomatic and dies fairly quickly after that, usually within 7 days or less.

VIRUS TRANSMISSION

Saliva of infected animals

99% of human cases are caused by **dog bites**

The virus attacks the brain
Rabies is **fatal** once symptoms appear



FATALITIES

Rabies affects **poor rural communities** mostly in Asia and Africa



One death

every:



40%

of the victims are children younger than 15

Once the rabies virus reaches the brain, it also replicates in the salivary glands, making transmission easy and possible. Transmission may occur through other routes too, but this is a much more rare occurrence.

While this manifestation of rabies is possible, many animals appear tame, also known as the "dumb" or "paralytic" form of rabies. This may be even more dangerous, as people attempt to care for animals, especially wildlife, who are tamer-than-usual or appear helpless.

Dogs in developing countries, both wild and those kept as pets, are a large reservoir of rabies and a potential source of human infection. According to the World Health Organization (WHO), dogs "are the source of infection in all of the estimated 50 000 human rabies deaths annually in Asia and Africa."

Approximately one human death from rabies occurs every 10 minutes. Most deaths are reported from Africa and Asia with almost 50% of the victims being children under the age of 15.

Rabies is diagnosed by examining brain tissue from the deceased patient. There is no way to diagnose rabies definitively before death. There is no cure for rabies. Vaccinating for rabies is the best (and only) way at this time to prevent this deadly disease. Animals (dogs, cats, livestock) and humans who work in high-risk jobs for rabies exposure should be vaccinated for rabies.

VACCINATING DOGS SAVES HUMAN LIVES

Rabies is 100% preventable



Vaccinating **70%** of dogs **breaks rabies transmission cycle** in an area at risk

Every dog owner is concerned





Napier germplasm at Jamkhar and Khamdang Gewogs

Chekey, Dzongkhag Administration, Trashiyangtse



Germplasm actually is a living tissue from which new plants can be grown. It can be seeds or another plants part- a leaf, a piece of stem, pollen or even a few cell that can turn in to whole plant.

In our Country we don't have adequate land for the development of permanent pasture. Many of the cattle now days in the villages are kept under stall feeding and also many of our farmers are facing fodder shortages during winter. Napier grass (*pennisetumpurpureum*) has become by far the most important due to its wide ecological range (from over 2000m). They have the high yield and ease of propagation and management.

More than 80% of our country's population depends on Agricultural activities, so dairy is important in the livelihoods of many farm households in terms of generating income and employment. Nutrients cycling through dairy animals and use of manure are key driving forces to dairy adoption and sustaining small holdings. The major constraining factors are: Lack of adequate and quality feeds particularly in dry season. To overcome such problems the Dzongkhag Livestock Sector has

selected Two Gewogs Jamkhar and Khamdang as the Napier germplasm to supply napier slips to other needy gewog In coming season. Each gewog has planted 25000 napier slips in 3 acres of land and set up as napier germplasm.

The importance of Napier grass can be seen from the role it plays as the major livestock feed in small holder dairy production in our Country. In Some part of our Country animals are confined in stalls and feed mainly on napier grass under zero grazing which proves advantages and beneficial to our farmers. It is observed that the napier grass based feed also increases the overall milk yield. Napier grass can withstand heavy grazing and provide considerable bulk of feed to livestock.

Napier grass plays important roles to conserve soil and livestock feed. Napier grass is propagated vegetative because seeds have low genetic stability and viability. Matured napier plants normally grow up to 4 meter high and have up to 20 nodes.

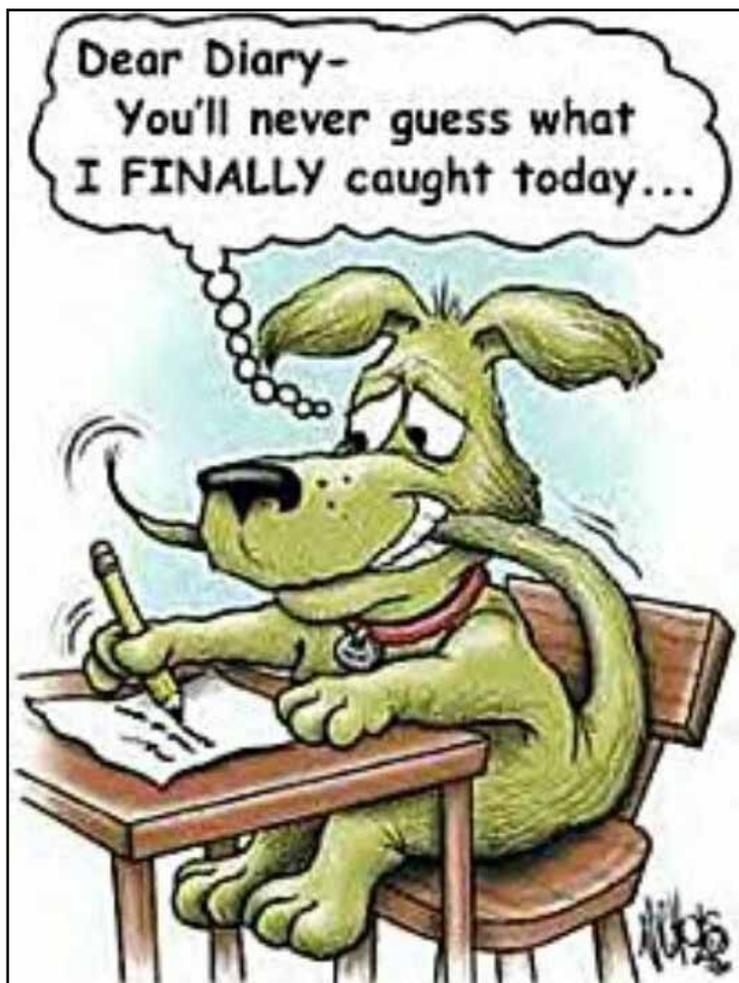
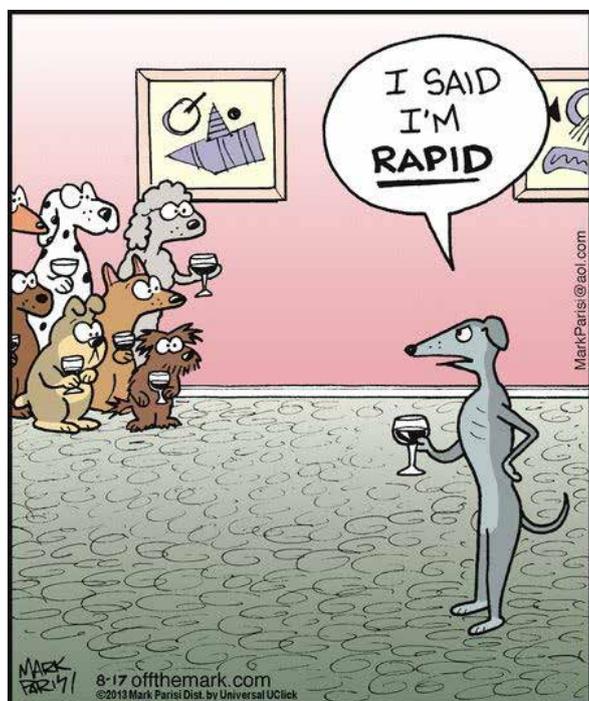
For optimal growth, napier grass required high and well distributed rainfall. It can grow at higher altitude above 2100m. The growth of napier

grass is lowered by low temperature. The optimal temperature for the growth of napier grass is 25 to 40 degree Celsius with high rainfall. Napier grass can grow in wide range of soil, performing best in fertile and well drained soils but cannot tolerate flooding or water logging.

The first harvest of napier grass should be when it attains height of 1-1.2 meters, which is usually three to four months after planting. At this stage napier grass has high quality and significant dry matter. Therefore grass should be harvested at intervals of six to eight weeks. If well managed it can be harvested every month in hot and wet environment.

Conventionally Napier grass is established in well-prepared land (ploughed and harrowed) from root splits, canes with 3 nodes or from whole canes. The material is planted 15-20 cm deep with splits planted upright, three node canes planted at an angle of 30-45° while whole canes are buried in the furrow 60-90 cm apart. The advantages of mulching are: to help conserve moisture and nutrients in the soil, to suppress weed growth and to maintain the soil temperatures for optimal microbial activity.

Leisure



RNR Extension Manual 2018

The RNR Extension Manual (Diary) 2018 is ready for distribution. Therefore, all Departments/Agencies/Central and Dzongkhag offices under the Ministry are requested to collect the Manual from ICTD during office hours along with the staff list (with designation) please.

The list can be submitted to ictd@moaf.gov.bt.

For any queries, kindly contact ICTD office at #323765/321142.

– ICTD

Rabies

The tough businessman was feeling very ill and went to the doctor. The doc examined him and backed away, saying, "I'm sorry to tell you this, but you have an advanced case of highly infectious rabies. You must have had it for some time. It will almost certainly be fatal."

"Could you give me a pen and paper?" said the businessman.

"Do you want to write your will?"

"No, I want to make a list of all the people I want to bite."

source: <http://www.jokebuddha.com>

**Submit articles for
RNR-Newsletter
to
tandindorji@moaf.gov.bt**



The Ministry's week

G Suite Training Conducted

Information & Communication Technology Division (ICTD) in collaboration with DITT, MoIC has conducted customized introductory/ refresher courses on G suite application for around 80 registered users in MoAF conference hall on 15th January, 2018. This training will enhance and acquire skills on G suite and provide officials with knowledge on effective usage

of Gsuits at workplace. It is a suite of web-based messaging and collaboration applications that Google hosts on their own servers. Google provides these applications as a "service," rather than as software.

The training covered various topics like Mail, Google Docs, Google Sheet, Google PPT, Google Calendar, Storages, 2 step verification etc.



New species of orchid discovered

Spathoglottis jetsuniae is a new and striking orchid species discovered and named in honour of Her Majesty Gyalsuen Jetsun Pema Wangchuck. The new species *Spathoglottis jetsuniae* N. Gyetshen, K. Tobgyel & Dalström, is a striking terrestrial orchid, first discovered accidentally by the staff of the National Biodiversity Centre on 3rd November 2016, in the remote region of Ngangla-Kaktong of Zhemgang during the

ground composition survey for other two species of orchids, namely *Paphiopedilum fairrieanum* (Lindl.) Stein and *Paphiopedilum venustum* (Wall. ex Sims) Pfitzer and tree seed exploration and collection expedition for the native Tree Seed Conservation Project. This striking terrestrial orchid in full bloom was found growing inside the selected plot, which was at 1038 masl elevation with a soil pH of 7.1 – 7.8.



MoAF received 353 power tillers from Government of Japan

His Excellency Mr. Kenji Hiramatsu, the Ambassador, Embassy of Japan in New Delhi handed over 353 power tillers worth approximately Nu. 137 million to Hon'ble Sanam Lyonpo under the general grand aid 'The Project for the improvement of Farm Machinery for Hiring Services of Tillage'. Bhutan has been the

recipient of KR II Grant for almost 40 years and has received 3186 power tillers till date. At present, there are 505 power tillers under the hiring services being implemented by the Farm Machinery Corporation Limited (FMCL) in all geogs. Similarly, 353 power tillers received will be also used for hiring services.



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Post Box: 1095, Thimphu-Bhutan
Tel(PABX): 02-323765/321142/322855
Fax: 02-324520
Email: ics@moaf.gov.bt
Website: www.moaf.gov.bt
