

TIMELY WEATHER PREDICTIONS

An operational Agrometeorological Advisory Services (AAS), Gramin Krishi Mausam Sewa (GKMS) scheme has been started by the India Meteorological Department (IMD) for the benefit of farming community in the country. Under the scheme, medium range weather forecast at district and block level for next five days is generated and based on the forecast, 130 Agromet Field Units (AMFUs) located at State Agricultural Universities (SAUs), institutes of Indian Council of Agricultural Research (ICAR) and Indian Institute of Technology (IIT) etc. and District Agromet Units (DAMUs) at Krishi Vigyan Kendras (KVKs) under ICAR network prepare Agromet Advisories on every Tuesday and Friday for the districts under their jurisdiction and for the blocks of the district of their location and communicate to the farmers to take decision on day-to-day agricultural operations. Presently agromet advisories are being prepared on every Tuesday and Friday for all the agriculturally important districts (~700) and around 3100 blocks by 130 AMFUs and 199 DAMUs.

Weather plays a crucial role in agriculture and changes in weather patterns can have a significant impact on crop yields. Weather-based crop advisory services can provide real-time information about weather patterns, crop health and appropriate measures to the farmers enabling them to make informed decisions about various crop management practices leading to higher yields and increased income. In order to cater the need of the farming community, District level AAS was initiated in collaboration with ICAR and SAUs through the network of 130 AMFUs located across the country with an aim of providing more relevant weather information and location and crop specific advisories. After successful implementation of district level AAS, with the introduction of upgraded high-resolution models, the service has further extended to the block level with the establishment of DAMUs in the premises of KVKs of ICAR. AAS rendered by IMD is a step towards weather-based crop and livestock management strategies and operations dedicated to enhancing crop production and food security besides reducing crop damage and loss due to unusual weather. Along with the biweekly bulletins, daily weather forecast and nowcast information are also disseminated to the farmers by Regional Meteorological Centres (RMCs) and Meteorological Centres (MCs) of IMD. Impact based forecast (IBFs) for agriculture are also being prepared by AMFUs and DAMUs based on the severe weather warnings for different districts of various States and UTs across the country issued by National Weather Forecasting Centre (NWFC), New Delhi and RMCs and MCs of IMD.

Agromet Advisories are disseminated to the farmers through multichannel dissemination system like print and electronic media, Door Darshan, radio, internet etc. including SMS using mobile phones through Kisan Portal and also through private companies under Public Private Partnership (PPP) mode. Farmers access the weather information including alerts and related agromet advisories specific to their districts through the mobile App viz., 'Meghdoot' launched by Ministry of Earth Sciences, Government of India. These weather details are also accessible by farmers through another App 'Kisan Suvidha', launched by Ministry of Agriculture & Farmers Welfare. Social media like 'WhatsApp' is also used for quicker dissemination of weather forecast and agromet advisories. WhatsApp groups of farmers have been created by various AMFUs and DAMUs to disseminate agromet services. State Agriculture Department officials of District and Block level are also included in these WhatsApp groups. IMD is also taking continuous efforts to popularize the services among the farming community by organising Farmers' Awareness Programmes (FAPs) in collaboration with AMFUs and DAMUs in various parts of the country. IMD along with the experts from AMFUs and DAMUs also participate in Kisan Melas, Farmers' Day etc. to create awareness about the services, so that more farmers get benefitted. To assess the economic impact of weather forecast-based advisories, multiple studies were conducted by an independent third-party organization viz., National Council of Applied Economic Research (NCAER) in 2009, 2015 and also recently in 2020. The recent study of 2020 concluded that 98 per cent of surveyed farmers (3,965 farmers across 121 districts of 11 states of India) made modifications to at least one of nine practices based on weather advisories. Average annual income of farming households increased from 1.98 Lakh, which adopted no modifications to Rs 3.02 Lakh which adopted all the 9 practices. An additional annual income was estimated of Rs. 12,500 per agricultural household belonging to Below Poverty Line category in rain-fed areas, while total income gain was estimated at Rs. 13,331 crore per annum in rain-fed districts. An investment of Rs 1000 crores will yield economic benefits of about Rs 50000 crores over a period of 5 years.

■ PUPUJI KOUL

Today is Good Friday and I pray to God to bestow strength and power of endurance to my Christian brethren to remember, recall and recount the crucifixion of Jesus Christ and follow the teachings and preaching's of the messenger and prophet of almighty-Jesus Christ.

All the religions of the world are great and all exhort mankind to lead a simple life and teach us to live in peace, harmony and live a contented life and remember God. All religions are the different paths to realize supreme reality and achieve divinity.

The religion of Christianity is one of the great religions of the world who's prophet is Jesus Christ who is the founder, prophet great teacher of Christianity and Christians all over the world revere, respect and follow his teachings to lead a contented and worthy life and serve the humanity.

Good Friday is one of the main and important days of Christian faith and Christians observe it solemnly and pray to God almighty and remember and emulate the teachings of Jesus Christ. Good Friday is a Christian holiday commemorating the crucifixion of Jesus and his death at Calvary. It is observed during Holy Week as part of the Paschal Triduum.

It is also known as Holy Friday, Great Friday, Great and Holy Friday (also Holy and Great Friday) and also black Friday. It is commemoration of the crucifixion and death of Jesus Christ and thus has much importance in the religion of Christianity and this auspicious day is observed with simplicity and soberly without enthusiasm every year. This auspicious day of Good Friday is observed as the passion of the Lord. It is observed as worship services, prayer and vigil services, fasting and almsgiving is the main observance of this festival. Like all other religions of the world fasting is observed and alms are given to needy and poor.

This year good Friday falls on April 7,

2023 (Western), April 14 (Eastern).Good Friday is not a festival and people should know it.

Good Friday should not be confused as a festival and the people and the followers of Christian faith should know that it is not a festival. Good Friday, the Friday before Easter, the day on which Christians annually observe the commemoration of the crucifixion of the Jesus Christ.

From the early days of Christianity, Good Friday was observed as a day of sorrow, penance, fasting and alms giving. In Germany it is observed as Sorrowful Friday. Following the Synoptic Gospels,(Matthew, Mark, and Luke), the mainstream Christian tradition has held that Jesus last meal with his disciples on the evening before his crucifixion was a Passover seder.

That would place the date on which Jesus died on 15 Nisan of the Jewish calendar, or on first day (starting at the sundown) of the Passover. According to the Gregorian (Western)Calendar, that day would be April 7.The Gospel according to John, in contract holds that Passover had not begun when Jesus final meal was held, which would place the date of Jesus death on 14 Nishan, Christians however do not commemorate that fixed date.

Instead they follow the apparently flexible date of the Passover-which conforms to the Jewish lunisolar calendar rather than the Gregorian solar calendar -by relating last Supper to the seder. Although that assumption is problematic, the dating of both Good Friday and Easter has proceeded on that basis. Thus Good Friday falls between March 20,the first possible date for Passover and April 23,with Easter falling two days later. The liturgical celebrations of Good Friday have undergone various changes over the centuries. In Roman Catholic Church the mass is not celebrated on Good Friday, though a liturgy is performed.

Unlike Christmas and Easter which have acquired numerous secular tradi-

tions, Good Friday has because of its intense religious connotation not led to an overlay of secular customs and practices. Despite its name Good Friday is a day for some reflection. Each Friday before Easter, Christians solemnly honor the way Jesus suffered and died for their sins.

They might attend a service that recounts Jesus' painful crucifixion. It is observed by fasting, offering alms to the needy and poor and remembering Jesus and his suffering and pain by his crucifixion and thus Good Friday is observed in a simple way free from pomp and show as it is the day on which Jesus was crucified and he died and thus no hustle and bustle is associated with Good Friday as in effect it is not the Good Friday but is observed as Bad Friday as it was the day on which Jesus laid down his precious life for truth and almighty and for the sins of the people he embraced death so boldly for the sake of supreme truth.

Therefore Good Friday is observed by the Christians with all humility, so briety and simplicity and thus the observance of the Good Friday is devoid of any festivity as it is not a festival but the day of reflection, contemplation and introspection and above all remembering the teachings of Jesus Christ. On this auspicious and sacred day of Good Friday Christians remember Jesus, his teachings and the pain and suffering he had undergone for the sake of supreme truth and he died for the sins of the people. Good Friday, the Friday before Easter, the day on which Christians annually observe the commemoration of the crucifixion of Jesus Christ. On the occasion of Good Friday e the day to resolve Christians resolve to practice the teachings of Lord Jesus the holy prophet of Christianity.

If you were not raised as a Christian --or didn't pay close attention in Sunday school-you might not understand the importance of this day. Every Christian knows the tale. Jesus died and rose again for the forgiveness of the

mankind's sins, promising those who believe in him eternal life. Christians typically celebrate Jesus resurrection each spring on Easter Sunday, participating in Easter traditions like Easter Egg hunts and gifting Easter baskets. But contrary to this Good Friday, which is observed near end of Lentand falls just days before Easter, does not get the same attention.

Only twelve states celebrate Good Friday an official holiday and many people do not know why they observe. Simply put, Good Friday is the day for Christians to commemorate Jesus' crucifixion. On this day according to the Bible, the Jewish religious leaders -who had condemned Jesus the night before for claiming to be son of God and King of the Jews -brought him to the Romans for sentencing.

He was sent from Pontius Pilate to Herod and then back to Pilate, who ultimately sentenced Jesus to crucifixion - the longest form of criminal punishment at the time. Jesus was beaten to death, forced to carry heavy wooden cross through jeering crowds and finally nailed to cross by his wrists and feet, where he hung until he died later that day. Despite its name, Good Friday is a day for sober reflection. Each Friday before Easter, Christians solemnly honor the way Jesus suffered and died for their sins. They might attend a service that recounts Jesus' painful crucifixion, and some even refrain from eating to show their sorrow. Catholic Churches strip their altars bare and muffle their bells as a sign of mourning.

But Christians soon turn to happier festivities. On the following Sunday they celebrate Easter -the day of Jesus's resurrection -with the church services, joys songs and family gatherings. In brief Good Friday is observed in a most simple, humble and sober way and it is devoid of festivities and is observed to remember, recall and recount the pain and suffering of the crucifixion of Jesus Christ for upholding truth and for atoning sins of the people.

Bhagwan Hanuman- a symbol of courage, valour and dedication

■ PRIYANKA SAURABH

Hanuman, who opened his heart to show Mata Devi that Lord Rama resides in his heart and does not require a pearl necklace as a gift from him, such amazing dedication and sacrifice not even imagined today can go, but the Lord retreats only for the devotion of his followers. Hanuman is worshiped by all people especially those who are engaged in sports and rigorous yogic practices.

Like Hanuman, we should try to serve our lord (our true self, Atman), by bringing our mind and intellect under the control of our soul. Hanuman is one of the most popular Hindu deities. He is the embodiment of Sewa (service), Bhakti (devotion), and Samarpan (dedication). He is an incarnation of Shiva. He is also believed to be the son of the Wind God (Maruti). Also known as Anjani-sut he has a high chin (hence name Hanuman) and a long tail. In physical features, he looks inhuman, but his qualities are divine/ superhuman, which we all aspire to.

He is endowed with tremendous physical and spiritual strength, courage and valor (hence the name Mahavira), fearlessness, devotion to Rama and Sita, (hence the names Rama-dass, Rama-doot, etc.) high intelligence, truthful speech, ocean of knowledge, wisdom and other good qualities. He is in complete control of all his senses. One character who is a symbol of complete devotion and loyalty is Hanuman. There is a poetic beauty to Lord Rama established through Lord Hanuman in all his works. Hanuman is most famous for his courage, valor, and dedication throughout Hindu mythology.

There are many different versions of the story of how Hanuman came into existence. Hanuman was the son of Lord Vayu and Anjana. Hanuman was an inquisitive child by nature, one day his hunger overcame him and he started chasing the Sun mistaking it for a fruit. Lord Surya mounted his chariot and sped away but Hanuman was not stopped, so Lord Indra had to use his Vajra to stop Hanuman. Hearing this Lord Vayu

got angry and raised the issue with all the deities and they accepted Hanuman to bless him with immortality. But Hanuman's mischief was as good as his long tail. It went on and on and there was no end, so the gods decided to put an end to it.

They cursed him such that he would forget that he had such great powers. This can be seen in the epic Ramayana when Jambavan reminds him that he has the power to become huge and shrink in size. Hanuman is often associated with courage and in moments of utter despair, people pray to Lord Hanuman to give them the strength to bear any problem bravely. Hanuman's strength is one of his greatest powers. He alone can take on an entire army.

He can cross oceans and uproot entire mountains. The magnitude of Hanuman's strength is unparalleled by any other god or human in Hindu mythology. According to Kambar's Ramayana in Tamil not just physical strength - Hanuman is described as Solin Selvan which means lord of the wealth of words. After being sent in search of Goddess Sita, Hanuman comes back to Lord Rama with the news and says to Rama "Kanden Sitaiye".

The choice of words is brilliant. He did not want Rama's heart to be sad even for a moment when he stops by saying "Sitai" - Sita. It also stands as an example of Hanuman's undying devotion to his lord. When Lord Rama's brother Lakshman was seriously injured in battle, Hanuman ji is sent to fetch a rare herb from Sanjivani Parvat. Lord Hanuman is unable to take the herb from the huge mountain, uproots the entire mountain, and travels back to Lanka in time to save Lakshman.

Many other stories testify to the greatness of Hanuman, perhaps that is why many people observe Hanuman Ji's fast on Tuesdays and in some cases on Saturdays as well. When in unexpected trouble or distress it is common for most Hindus to recite the Hanuman Chalisa which is a hymn in praise of Lord Hanuman.

The verses were written by Tulsidas who was also an ardent devotee of Hanuman. It is said that one can recite these verses easily and it has immense benefits for the human psyche. Hanuman is our go-to god for most situations in life. Like Lord Ganesha, Hanuman is also believed to be the remover of obstacles and the destroyer of evil spirits.

Now it is a common belief to keep Hanuman Chalisa under your bed to avoid nightmares. The kind of faith that the Hindu society places in him is remarkable. Man is bound to commit mistakes in day-to-day life, and reciting Hanuman Chalisa at night helps man to get rid of his sins. It purifies the mind and soul like a cleanser. It brings out a kind of calm even in difficult situations. In most Hindu communities, Hanuman is worshiped as a village boundary deity.

There are also many temples for the god. In almost all Vishnu temples, the idol of Hanuman ji is the first thing one sees upon entering the premises. The specific use of butter on the face of the idol easily tells that it is Hanuman. The literal meaning of Hanuman is the one with the deformed jaw. Like Lord Vishnu, the use of Tulsi garland on Hanuman Ji is also another important feature. Hanuman Jayanti is celebrated every year in the month of Chaitra. It marks the birth of one of the most exemplary deities in Hindu mythology. He is the epitome of discipline, loyalty, and dedication, qualities that can hardly be found in this highly competitive world. Many people circumambulate Lord Hanuman for valor, faith, bravery, wisdom, and success. Hanuman, who opened his heart to show Sita Devi that Lord Rama resides in his heart and does not require a pearl necklace as a gift from him, such amazing dedication and sacrifice not even imagined today Can go But the Lord retreats only for the devotion of his followers. Hanuman is worshiped by all people especially those who are engaged in sports and rigorous yogic practices. Like Hanuman, we should try to serve our lord (our true self, Atman), by bringing our mind and intellect under the control of our soul.

10 herbs effective for controlling diabetes

■ PROF (DR) R D GUPTA

Diabetes is a disease which happens due to some physiological disorder, i.e. metabolic disorder. It occurs as a result of lack of insulin or a surplus of insulin antagonists, leading to a relative insulin lack. According to WHO, India has the largest number of diabetes in the world hovering between 25 to 30 million. In the coming years, India is projected to have more than over 57 million in 2025.

In India, the earliest mention of the use of medicinal plants has been made in the Atharva Veda, one of the oldest repositories of human knowledge. As far back as 4,000 BC and even earlier, Ayurveda, an ancient Hindu art of medicines and of prolonging life, has been believed to possess a status of its development. The whole credit for standardizing this system of medicines goes to well known, renowned personalities viz., Charak, the Physician and Sushruta, the Surgeon. Their well noted works written so long ago that these are still greeted by the leading authorities of the western countries. However, the contribution of Dhanwantri, the pioneer God of Medicine, destroyer of senility, disease and death descended on the Mother Earth, cannot be ruled out. He was, infact, teacher of Susruta and his other colleagues is known as Progenitor of Ayurveda.

Medicinal plants not only play an important role in human life but also play a pivotal role in animal life, especially in rural areas. Rural people of India living in about 6 lakh villages and the tribal dwelling in forests always utilize medicinal plants for preventing and curing various ailments and diseases. However, in the present write-up, a role of a few medicinal plants has been detailed with regard to cure diabetes.

10 ethno-medicinal herbs used for controlling diabetes: - In many parts of the developing countries of the world more than 80 per cent of people depend on traditional medicines. There are many medicinal plants that have potential for treating the symptoms diabetes and are generally regarded as safe.

1. Bel (Aegle marmelos): The tree belongs to Rutaceae family. Fresh leaf extract (10 to 15 ml) of this /tree is taken thrice daily (morning, noon and night) for a month.

2. Neem (Azadirachta indica): This species belongs to family Meliaceae. Use of Neem, reduces glucose level, reduces infections which is caused due to slow healing, improves the normal tone of an organ and regularises all biological processes. Its fresh leaf extract (10 to 20 ml) is taken once in the morning during empty stomach. Alternatively, 10-12 leaves of neem are boiled in a cup of water for 5 to 10 minutes.

The liquid is then strained and taken daily.

3. Aam (Mango) (Mangifera indica): The family of this tree is Anacardiaceae. It repairs the activity of pancreas, improves insulin secretion, destroys intestinal worms and regularizes all biological processes. The tender leaves are proved beneficial for diabetes. An infusion is prepared by soaking 15 g of fresh leaves in 250 ml of water overnight, and squeezing them well in the water in the morning. About 100 ml of the filtrate should be taken every morning to control early diabetes. Alternatively, leaves are dried in the shade, powdered and preserved for use whenever it becomes necessary. About 4g of this powder is taken once daily in empty stomach or half a teaspoon of this powder should be taken twice daily.

4. Jamun (Syzygium cumini): It controls pathological conversion of starch into glucose, repairs activity of pancreas, regularises all biological processes, helps in active movement of bowels and reduces glucose level. To treat diabetes, Jamun tree's (Myrtaceae family) seed powder (2 to 4 g) is taken thrice a day (morning, afternoon and night). Alternatively, fresh leaf extract (5 to 10 ml) of the tree can be taken twice a day (morning and night). The inner bark of the Jamun tree is also used in the treatment of diabetes. The bark, after drying is burnt to produce white ash. This is then

pestled in mortar, strained and kept in a bottle. About 10 g of this ash should be given to the diabetic patients during empty stomach with water in the morning, and 20 g in afternoon and evening (10 g each), an hour after taking meals. An equal quantity of Jamun, amla and bitter gourd powder makes a very useful remedy for diabetes. A teaspoon of this mixture once or twice a day has proved very effective in progress of the disease.

5. Bitter gourd (Momordica charantia): Bitter gourd (Karela) or bitter melon has been known to reduce glucose level by improving peripheral glucose uptake. It also regenerates activity of pancreas. This vegetable should, therefore, be included in the diet of the diabetic patients. For getting good results, the diabetic patients should take its juice every morning on empty stomach. For this purpose, about four or five bitter gourds are taken, and after peeling, their juice is extracted. The seeds of bitter gourd can be added to food in a powdered form. Diabetics can also use biter gourd in the form of decoction by boiling its pieces in water or in the form of dry powder.

6.Fenugreek (Trigonella foenum graecum): Its use helps in stimulating and enhancing insulin secretion and, thereby, reducing the blood glucose. It also improves

glucose oxidation and reduces cholesterol level. The seeds of fenugreek have been found effective in the treatment of diabetes.Fenugreek seeds when given in the range of 25 to 100 g daily, assist in diminishing hyperglycaemia in diabetic patients. Levels of glucose, serum cholesterol and triglycerides also get reduced significantly when the seeds of fenugreek are given to the diabetic patients.

7. Sahanjna or Munga (Moringa oleifera) : Belonging to the family of Moringaceae, the root decoction of the tree (5 to 10 ml) is taken twice daily i.e. during morning and evening hours.

8. Giloy or Guduchi (Tinospora cordifolia): The plant is a climber and belongs to family Menispermaceae. The stem of Giloy about 30 to 40 g and amla fruit 25 g are boiled together. The decoction 50 ml.with a pinch of turmeric powder is taken twice daily.

9. Pipal (Ficus bengalensis): Use of bark tree has been found very useful in reducing glucose level in the blood. It also improves the normal tone of an organ. Grind dry bark to get powder. Take half teaspoon powder once daily for 3-4 days.

10.Karanj (Pongamia pinnata): Belonging to family Fabaceae, its flowers (100 to 150 g) are boiled to obtain a decoction. The decoction (50 to 60 ml) is taken orally once daily in empty stomach.

