

# The Pyongyang Times

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## LEAD

### Setting devotion to people at core of WPK's activities

It is the supreme principle of activities of the Workers' Party of Korea to steadily improve the people's material and cultural standards of living.

The Third Plenary Meeting of the Eighth Central Committee of the WPK held last June discussed as its major agenda items the issues of protecting the life and safety of the people, of stabilizing and improving their living standards and of improving and strengthening the Party's childcare policy.

In the meeting, WPK General Secretary Kim Jong Un said it is the main point of the plenary meeting to take decisive enforcement measures for immediately solving the urgent matters which attract the deepest interest of the people and to which they look forward, and issued a special order that he signed with sincerity to make even a bit of contribution to stabilizing the people's living.

In the past, too, the WPK

always went deeper among the people to become their firm spiritual pillar and share weal and woe near them and devoted everything for their wellbeing whenever they were in trouble.

One day in September 2020 when the General Secretary inspected Kangbuk-ri of Kumchon County, North Hwanghae Province, which was splendidly rebuilt in a short time after being damaged severely by natural disaster, he asked over and over again if the residents were pleased, and said that he was really glad to hear that they were delighted and that the Party was undoubtedly right to do that if they were pleased.

The WPK has always given top priority to the people's life, safety, interests and convenience and regarded everything as really good if they liked it.

That is why the General Secretary even got on a new model of trolley bus on a sultry

day in August 2018, saying he would only feel at ease when he rode it first, and examined handles and other fittings one by one.

When new streets and leisure facilities such as Changjon, Mirae Scientists and Ryomyong streets and the Munsu Water Park were under construction, he visited the construction sites time and again despite the fierce heat and heavy rain.

Now that economic construction and people's livelihood face greater obstacles due to the global pandemic crisis and unprecedented natural disasters, the WPK remains more faithful to the ideal of devoted service for the people.

Therefore, the Korean people call the WPK a motherly Party without reserve and the Party regards it as a unique honorary title and tries to make more efforts for the people.

Yang Hyok

## PATRIOT

### Nation blessed with growing number of patriots

Meritorious persons of socialist patriotism are found everywhere in the DPRK which is seething with enthusiasm for implementing the first-year tasks of the new five-year plan. They are unassumingly leaving indelible marks of their life in the building of a thriving country with their intense loyalty, clean conscience and untiring devotion and passion.

In October 1979, President Kim Il Sung personally conferred the title of DPRK Labour Hero and a doctorate on a female scientist who had sacrificed the love and happiness of youth to her scientific research, and said that the example of serving the Party and revolution and the country and people like her should be followed by all.

Over more than forty years since then, the DPRK has produced many fighters of self-reliance who carry out their revolutionary missions by their own efforts without fail and persons possessed of conscience as clean as a white gem who devote their all to the benefits of the Party and revolution.

The movement of following the examples of the paragons of the times became even brisker in the trials unprecedented in history.

In 1999, when Jong Song Ok won a gold medal in the women's marathon event of the Seventh World Athletics Championships, Chairman

Kim Jong Il made sure that the people across the country learned after the spiritual world of Hero Jong Song Ok and, at the same time, put forward frontrunners in various fields as heroes of the times.

The Korean people cultivated their minds in the days of severe trials as they learned the noble spirit of the chairwoman of the management board of a farm in Jagang Province who set an example of triple cropping for one year, a soldier-turned-coalminer who tried hard to increase coal production in the deep pits, a forest ranger who conscientiously conserved green forests of the country and a scientist who sacrificed her youth and life to scientific study.

Today, a growing number of people join the ranks of meritorious persons of socialist patriotism every year across the country under the guidance of General Secretary Kim Jong Un.

Though their professions and workplaces are different, they regard the admirable title of meritorious person of socialist patriotism as the most valuable wealth of their life and continue on their road of devotion. And a lot of people are trying to follow suit.

The DPRK has a bright future as there is a growing number of patriots.

By Ri Sang Il PT

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## ECONOMY

### Different units fulfil July economic plans

Many units in the metallurgical and machine-building industry sectors completed their economic plans for July.

The Hwanghae Iron and Steel Complex increased the operating rate of the equipment including oxygen-blast furnace and UHP electric arc furnace to carry out the plans for pig iron, steel and rolled steel production, and the Chollima Steel Complex steadily improved the steel

production method based on granulated iron while producing much molten iron every day.

The Posaan Iron Works serviced and repaired the rotary furnace according to a well thought-out plan to ensure regular operation and put efforts to the management of the equipment, and thus increased the granulated iron output in July. The Puryong Ferroalloy Factory properly solved the

problems arising in the operation of the facilities including electric furnace, moulding machine and drying furnace, thus fulfilling production plans.

The Musan Mining Complex and the Unnyul and Jaeryong mines improved their tunnelling and conveyance capacities, while pushing ahead with removal of overburden and deep mining so as to produce more iron ore. The Hungnam Electrode Factory and

the Jangsan and Ramjong mines mobilized all potentialities to ensure proper production and supply of quality electrodes and fireproof materials.

The Pyongyang General Electric Cable Factory 326

overfulfilled its economic plan by 20 percent in July.

The Ryongsong Machine Complex established a new moulding process and introduced an advanced moulding method to give precedence to the production of materials and, at the same time, pushed ahead with the processing of spare parts to finish the production of air compressor and other machines. The Taean Heavy Machine Complex adopted rational ways to improve the processing speed and quality and organized the connection between processes scrupulously, thus building on the successful results in the production of power generating facilities.

The Anju Pump Factory and Kyongsong Insulator Factory introduced research findings that are conducive to improving



Molten iron is turned out in the Chollima Steel Complex.



Packed fertilizer is transported by conveyor belt at the Hungnam Fertilizer Complex.

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## EXHIBITION

# Event commemorates anniversaries of Kim Jong Il's Russia tours



A photo exhibition is held in the Russian embassy in Pyongyang to mark the 20th anniversary of Chairman Kim Jong Il's visit to Russia and the tenth anniversary of his visit to Russia's Siberian and Far Eastern regions.

A photo exhibition was held at the Russian embassy in Pyongyang on August 3 to mark the 20th anniversary of Chairman Kim Jong Il's historic visit to Russia and the 10th anniversary of his visit to the Siberian and Far Eastern regions.

On display there were photos showing the undying exploits performed by Chairman Kim Jong Il and the respected Comrade Kim Jong Un for the development of the DPRK-

Russia friendship through their energetic external activities.

Im Chon Il, deputy foreign minister, and officials concerned were invited to the event.

Present there were Ambassador Alexandr Matsegora and staff members of the Russian embassy.

Speakers at the event said that the historic visits of Chairman Kim Jong Il and the respected Comrade Kim Jong Un to Russia were

important events which made a distinguished contribution to further developing DPRK-Russia friendly relations and ensuring peace and security in the region.

The meetings and talks between the top leaders of the two countries served as historic occasions in providing a new motive power of the development of DPRK-Russia relations and laying a firm foundation for expanding many-sided cooperation between the two countries, they stressed.

It is an important guarantee for the prosperity of the peoples of the two countries to steadily develop the friendly and cooperative relationship on the principle of equality and mutual benefits, they said.

The participants looked round the photos on display.

Meanwhile, a DPRK's photo, book, stamp and handicraft exhibition took place in Vladimir, Russia, under the co-sponsorship of the provincial administration and legislative assembly.

KCNA

## INSPECTION

# Premier tours South Phyongan Province



Premier Kim Tok Hun (second from right) inquires about farming in Tongnim Cooperative Farm, Mundok County.

Premier Kim Tok Hun, who is also member of the Presidium of the Political Bureau of the Central Committee of the Workers' Party of Korea, inspected different sectors of South Phyongan Province.

Looking round farms in Mundok, Sukchon and Taedong counties, he instructed agricultural guidance officials to take strict measures to prevent damage from lingering fierce heat and blights and provide scientific nutrition management of crops by generalizing experience of the units that go ahead of others to ensure safe crop harvest.

After acquainting himself with production at the Namyang Salt Works, he stressed the need for salt production units across the country to concentrate on making salt production intensive and mechanizing it and apply advanced salt-collecting methods in order to drastically increase production.

At the Anju Area Coal-mining

Complex, he took appropriate steps to solve problems arising in the stable supply of electric power for coal pit construction and coal mining. At the Jangsan Mine he pointed to the mistakes its officials made of failing to pay careful attention to and fully exhibit their creative abilities in business management, before discussing the ways to consolidate the foundations for the production of fireproof materials.

The field consultative meetings took detailed measures to organize the manuring and cultivation of crops in the latter half of their growth more scrupulously at the farms in the province, bring operation planning and command closer to reality by enhancing the responsibility and role of economic guidance officials and reenergize production by building up organic relation between units and sectors properly.

KCNA

## Nationwide

### Power industry gears up for prospective production

The hydroelectric power sector is working scrupulously to repair generating equipment and manage technology so as to ensure the full operation of equipment in the rainy season and the stable production of electric power next year.

Orangchon Power Station Unit 1, the Samsu Power Station and others are working to wind up projects for repairing the working pit of waterway tunnel and building the retaining wall of drainage canal.

### Milk production picks up in Jagang Province

Jagang Province has more than doubled the daily output of dairy products over the same period of last year and is supplying them to nurseries and kindergartens on a regular basis.

It adopted an innovative measure to produce more goat's milk by revitalizing the existing stockbreeding bases, while reinforcing their equipment by supplying them with hundreds of pots, refrigerating facilities, containers, vehicles and others in a short time.

### Innovation plans applied

The machine-building industry sector is making dynamic efforts to develop

and apply technical innovation plans.

The Songchongang Electrical Appliances Factory developed a plasma cutting device and a speed control and overcurrent protector for DC motor, and the Kyongsong Insulator Factory and Ryangchaek Bearing Factory applied innovation plans that help boost the performance of products and reduce their costs.

### Idle materials collected in South Hwanghae

South Hwanghae Province has collected several hundred tons of idle materials and sent them to local industry factories.

The People's Committee, Rural Economy Committee, Posts and Telecommunications Management Bureau and other provincial-level agencies installed boxes for collecting various kinds of idle materials separately in the offices and buildings.

### Measures taken against harmful insects

The agricultural sector is striving to take appropriate measures to prevent damage from harmful insects in the rainy season.

The central plant epidemic prevention centre under the Ministry of Agriculture strengthens the observation and forecast system for the prevention of plant diseases

and insect pests in cooperation with the provincial, city and county centres.

### Production of consumer goods increases

Workteams in North Phyongan Province have overfulfilled their first half-yearly plan for the production of consumer goods by 5 percent.

Housewives' workteams in Sinuiju are making such quality consumer goods as sundry goods, children's clothes and toys, while in some counties straw goods are produced with locally-abundant raw materials.

### Development of high-tech products in full swing

Lecturers and researchers at the Department of Physics of Kim Il Sung University developed a metal bonded diamond grinding and cutting blade.

This good-performance tool that can cut and grind any tiles or stones with domestic raw materials and technology and less cost will reportedly be used in different sectors of the national economy including construction.

The nano-engineering branch also developed a high-speed pyrolysis device to turn out a binder with locally-abundant organic materials.

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## Economy: Many units carry out July tasks

FROM PAGE 1

the performance of products and ensuring domestic production of materials and turned out a variety of high-quality pumps, insulators and disconnecting switches. The Hamhung youth electrical appliances factory tapped latent reserves to produce different kinds of feeder boxes to be sent to the construction site of 10 000 flats in Pyongyang.

Workers at the Kusong and Mangyongdae machine tool factories, Ryangchaek Bearing Factory and other units completed their economic plans for July.

The coal industry sector has completed its July quotas.

The Tokchon Area Coal-mining Complex applied efficient blasting methods and improved the technical knowledge and skills of tunnelling workers to achieve

tunnelling results 1.2 times greater than previously.

The Pukchang and Sunchon area youth coal-mining complexes deployed tunnelling workteams in favourable places with rich deposits and good mining conditions in a concentrated way and increased the proportion of work done by machines in coal pits.

While the Kujang and Kaechon area coal-mining complexes provided themselves with enough coal fields by giving precedence to tunnelling and channelled big efforts into mining, other coal producers including the Anju, Tukjang and Onsong area coal-mining complexes implemented their daily plans without fail.

The rail transport sector has carried out its July freight transport plan.

The Pyongyang Railway Bureau shortened the train stoppage time by increasing the actual operating rate of engine.

By Kil Chung Il PT



JUNGSAN

# County invests time and effort in poplar growing with payoff

Everywhere you go in Jungsan County of South Phyongan Province you can see fast-growing poplar trees.

Saplings grow competitively in the circular cuttings ground, tree sapling greenhouses and outdoor cultivation grounds of the parent tree nursery of the county forest management station and tens of thousands of Sangwon poplar trees stand along the four-kilometre banks of the Mubon Stream in Mubon-ri like a tree wall.

“In fact, we first planted and grew this tree to solve the firewood problem. But now we really benefit from it in terms of firewood and in various other economic factors,” said a county official.

## From 100 to hundreds of thousands of trees

The county began to plant Sangwon poplar trees in 2015.

According to experts, the tree grows 25m high, over 2 metres a year on average, and can be used as firewood, a raw material for papermaking and timber five years after it is planted. Its caloric value being equal to that of coal, it is used as a fuel for thermal power stations or heating boilers in some countries.

“At first, we began county afforestation with some 100 tree saplings,” said Ri Hyo Il,

manager of the county forest management station.

According to him, the tree grows well in land with deep soil horizon and over 40 percent soil humidity and demands lots of sunshine. So land in the water areas is the most suitable soil for its growth, he said, adding the county has many rivers and streams, which is favourable for its growth.

The station built a large-capacity water tank near the parent tree nursery to secure a water source, provided enough conditions for watering them while focusing on observation and applied a tree sapling production method based on tissue culture for two-time cultivation a year to grow healthy saplings.

Tree saplings cultivated in the parent tree nursery and several other nurseries took roots in the waste land along the several rivers and streams and reservoirs in the county.

“As they are planted there, it is easy to tend them and we do not need much labour for transport in case they are cut for firewood. And as they function as a windbreak, they help protect arable land from flood and prevent damage on crops from typhoons,” said Kim Thae Sik, workshop manager of the county forest management station.

The county produced hundreds of thousands of tree saplings till last year, planted some 140-hectare poplar forests and sent many tree saplings to South Hwanghae Province, Kaesong and Rason cities and other areas.

## Tree benefits county population

The county people say they benefit from Sangwon poplar.

First of all, it helps the county solve the firewood problem.

Farmers say they planted a 15-hectare forest with 3 000 trees in a hectare and thinned out them from the following year, started cyclic felling

from the fifth year when the accumulated timber per hectare amounts to 300 cubic metres, and since then they have produced 150 cubic metres of firewood every year, which is enough for dozens of families.

And the tree is very useful as its branches are used as bow-shaped supporting sticks and others for farming materials and it helps solve the shortage of compost.

In the past every household in the county consumed 3-5 tons of dry rice straw as fuel a year, but now they produce 5-6 tons of compost with the amount of rice straw which

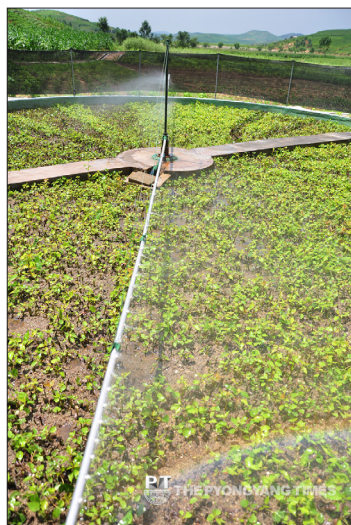
was used as fuel to improve soil fertility.

“In the past a large volume of water flowed into the Mubon Stream in rainy season, washing away farmland, submerging ripe crops in autumn and thus decreasing the crop harvest. But now the poplar forests protect farmland and ecological environment and ensure safe crop harvest,” said an old man who has lived in Mubon-ri for a long time.

Road keepers and farmers say in unison that trees are very useful in every way as they improve landscape and cast shade over them when they have a rest in sunshine.

“We will plant Sangwon poplar tree forests in larger areas to reduce dependence on forests and turn the county into a place covered with green forests,” said the county forest management station manager.

By Jong Hwa Sun PT



Saplings of Sangwon poplar are cultivated in outdoor and indoor facilities in Jungsan County, South Phyongan Province.

AN YONG CHOL

PATRIOT

# Leaving their traces behind them

## Woman scientist contributes to revitalizing production

The Ulmildae-brand products of the Pyongyang Building-Materials Factory are very popular with people since their quality satisfies the demand of users.

The quality guarantee of the products depends on the ability of technicians, and among them is Jo Myong Ok (pictured), director of its industrial technology institute.

After graduating from the then University of Construction and Building-materials Industry, she began her career as designer of a design institute. Jo took charge of the designing of processes at the time when the construction of the Pyongyang Building-Materials Factory, a modern building-materials production base, begun in the early 2000s.

After the factory was built, she remained in the factory.

Since then, she has made painstaking efforts to put production processes on a scientific and technological



basis. In the course of this, she achieved lots of successes to contribute to the revitalization of production.

Her first technical task was to make a plant crusher in order to improve the quality of coating materials.

Later, she buckled down to the research and making of CNC machining centre for producing sanitary ware moulds.

Reading special technological books and repeating experiment hundreds of times, she provided a technical guarantee one by one.

Sometimes she toured different places to expand her knowledge of the CNC machining centre

or repeated experiments related to processing plaster as she skipped meals and forgot sleep.

The factory turns out different kinds of sanitary ware for different moulds with the CNC machining centre as it pleases.

The factory laid foundations for mass-producing tiles by relying on domestic materials last year.

She explored raw materials and conducted research in a mining area which was far away from the capital city, thereby developing a new material for glaze suitable for the production of tiles and making it possible to prevent the discolouration of tiles in the calcination process.

In the wake of developing a program for calculating the combination ratio of materials for ceramic ware glaze, she resolved all technical problems arising in ensuring the domestic production of tiles.

She was awarded the February 16 Science and Technology Prize, the top honour for scientists and technicians in the country, and had the honour of being a Central Meritorious Person of Socialist Patriotism this year.

## Inventive workshop manager

“Our workshop manager has made a great deal of achievements including the introduction of the process of producing tile with the clay which is abundant around the factory and the process of impact-type powdered gypsum production,” said Ri Sun Chol, staffer of the Taesong Ceramic Factory.

Kim Chun Sop (pictured) who has worked as a workshop manager for a long time has come up with four national inventions and dozens of original plans.

He has made strenuous efforts to create technical innovation plans contributing to the normalization of production including “Method of producing sanitary ware based on glaze with fluorescent colour”, “Method of producing sanitary ware using mineral materials for ceramics in Sangwon area” and “Introduction of batch furnace built with insulating bricks”.

He studied a lot after enrolling at a correspondence course under the study-while-you-work system.

He initiated the remodelling of an existing kiln into a continuous process soon after



becoming workshop manager, upgraded it into a batch kiln to boost its production capacity later and proceeded to introduce a PLC device for automatically controlling the temperature of kilns.

Most recently alone, he successively suggested ways to diversify products in terms of kind and form and improve their quality and productivity.

Taking their cue from Kim Chun Sop, the employees of the workshop presented various technical innovation plans as they pooled their ideas and efforts.

Almost all the employees grew into highly skilled workers and engineers and the workshop carried out national economic plans without fail every year.

By Chae Hyang Ok PT



## APPLIANCE

# Slag measurement put on scientific basis for blast furnace

Researchers of the Mathematics Department of Kim Il Sung University developed a system of measuring slag level in the oxygen blast furnace.

"A layer of slag is generally formed as molten iron boils during the melting process. To maintain its thickness is very important in ensuring the stability of the furnace and putting production on a normal track," said Ri Kwang Il, director of the information mathematics institute.

Many scientists had attempted to solve the problem in the past, but in vain.

It has been regarded as the Gordian knot for a long time.

Scientists of the institute buckled down to the research to put slag level measurement in an oxygen blast furnace on a scientific basis at the Hwanghae Iron and Steel Complex.

"At first, we tried to apply

a monitoring camera for the measurement, but it was impossible to ensure its accuracy due to the unstable furnace conditions and flames. At that time, a veteran skilled worker told us that the vibration noise from the furnace keeps changing according to melting process," said section chief Jo Chol Man.

Finding a clue from the information, they carried on in-depth research and scientifically corroborated that the vibration property of the furnace is related to the thickness of slag layer.

On the basis of that, they developed a vibration sensor, control program and a comprehensive system of communications and analysis.

In particular, they designed a device circuit afresh and made a sensor at the lowest cost possible before developing a real-time level measurement program

which efficiently blocks out various kinds of noises in the melting workshop including the one that is produced when steam is discharged and which recognizes the vibration noise of the furnace alone.

They also confirmed a rational location of the sensor through dozens of experiments and perfected the standard operating method of the measuring system.

Last December, they applied the slag level measurement system to the oxygen blast furnace at the Hwanghae Iron and Steel Complex.

It has made it possible to ensure the normal operation of the furnace and turn out quality pig iron while increasing the amount of tapping per charge.

It was later introduced into the Kim Chaek Iron and Steel Complex.

By Yun Kyong Il PT

## CABLE

# Innovative ideas applied to cable production



KIM YONG CHAN

Employees work to apply an idea to production at the Pyongyang General Electric Cable Factory 326.

The Pyongyang General Electric Cable Factory 326 is positively introducing valuable technical innovation plans into production.

One of them is the recycling of cuttings of galvanized iron wire.

In general, galvanized iron wire is regarded as an indispensable material for the production of cables of all sizes.

"Cuttings of galvanized iron wire come from the production of cables as a natural outcome. However, our factory failed to recycle them," said section chief Jo Song Uk.

To solve the problem, technicians newly developed a butt-welding machine for galvanized iron wire.

This welding machine proved to be worthwhile in terms of fully satisfying the tensile strength of cables and other technical specifications and saving lots of materials.

And the factory also established a cooling water

recycling system for the production of cables.

As a result, it made it possible to ensure the stability of production and enhance cooling efficacy while saving much water and electricity and addressing cooling water shortages as compared to the past.

In addition, it remodelled the process of elongating core wire and screening aluminium sheet that had been controlled by a high-speed elongation machine and braiding machine for screening into the one using only a high-speed elongation machine, thus halving the consumption of manpower, equipment and electricity as against before.

Of late, it enhanced the heat-resisting grade of F-class copper wire by developing a nano-mica enamel-coating solution, thereby remarkably improving the quality of its products.

By Ri Myong Jun PT

## FORMULA

# Combined baby food developed

Pyongyang College of Foodstuff and Consumer Goods Industries has recently brought out mixed grain powder.

According to developer Ryom Un Hyang, grain powder is a supplementary nutritious food for babies in the weaning period, a very important stage of life when the growth rate is the fastest, many changes take place in the body and the intellectual capacity increases. Therefore, in that period, it is imperative to ensure an adequate intake of the five essential nutritive substances—proteins, carbohydrates, minerals, fat and vitamins.

The research team paid attention to the fact that some natural materials like grain contain a lot of nutrients essential for children's growth.

Many countries are making a variety of highly nutritious foods from grains like buckwheat, corn, barley and oat and applying mixed grains to the production of children's foodstuffs.

Therefore, the research team set it as their objective to develop grain powder using five cereals including rice, bean, barley and millet.

The five cereals have taken a major part of the Korean people's dietary life from olden times.

Foods made from them invigorate the human body as they have balanced contents of several kinds of nutritive and medicinal components.

The combined grain powder is made by mixing rice, the main ingredient, with appropriate amounts

of different grains including bean which contains various nutrients. It is an excellent subsidiary food for suckling babies who are more than six months old.

It is processed in such a way that it preserves natural nutrients and its quality indices including taste and digestibility have improved remarkably.

By Kim Il Jin PT

## CASTING

# Combustion model casting process established

The Pyongyang Textile Machine Factory has newly built a combustion model casting process.

"Until a few years ago, we used to ask a machine research and manufacturing unit to make the main body and other castings for air jet loom," said Kim In Phal, a workteam leader of the factory.

So, it was hard to ensure the period of loom production to be supplied to textile mills every year.

The factory buckled down to establishing the combustion model casting process in order to put the production of modern and efficient textile machines on a normal footing.

"As the labour- and energy-saving combustion model

casting method is widely used in the field of castings, it is simpler in the casting production process and has higher surface precision of castings than the traditional casting method and helps produce castings with complicated structures," said Kim Kun Hyok, a technician of the factory.

The factory carried out the renovation project of different buildings for mould processing, painting and other main work areas, manufactured necessary facilities, developed their programs and invented and introduced various jigs and tools.

In particular, it confirmed the position and number of gas passing film, thereby ensuring the uniformity of

sand injection and completely removing gas from the casting process.

It contrived a vibration sand sorting strainer and efficient dust collecting device to recycle sand and prevent environmental pollution while deciding on the position and size of rational molten iron inlet and designing and manufacturing the general control panel which can automatically control all machine elements.

Besides, it set up the combustion model casting process in a short time by solving technical problems including the thickness of paint layer and the intensity of vibration compaction in conformity with its specific conditions.

As a result, the factory laid foundations for making and supplying all castings including the main body of air jet loom by its own efforts.

By Kim Kum Myong PT



RYANG KUM CHOL

Researchers analyse nutritive elements of combined rice powder at Pyongyang College of Foodstuff and Consumer Goods Industries.



## CAMPUS

# 'Botanical garden' helps students broaden their horizons



AN YONG CHOL

**Students solidify contents which they learn in lessons in the teaching forest at Changdok School.**

The landscape of Changdok School in Chilgol-dong, Mangyongdae District, Pyongyang, draws the attention of many.

The landscaping section has been formed centring on the school building and a variety of flowering shrubs and trees grow there. Therefore, people call the section a "small botanical garden in the schoolyard", which

was designed by introducing formative art in consideration of the shapes, colours and diverse growth effects of plants.

The landscaping section covering thousands of square metres is filled with good species of trees, flowers and ground-covering plants of great ornamental value.

Pine, fir, *Picea Koraiensis* and other evergreen coniferous

trees, and lilac and red maple grow healthily as plum, apple and peach trees give out the fragrance of fruits.

There is an explanation board for each plant that bears its botanical name, distribution areas and brief biological features, which is of big help for students' study.

According to an official of the school, it buckled down to landscaping in earnest three years ago.

With the assistance of experts, it designed a garden in a distinctive style and planted plants that have been brought from central and local nurseries, floricultural farms and forestry management stations to tend them with utmost care and acclimatize them.

Saying that they get more attached to flowering shrubs and trees as they have cultivated them with their own efforts, teachers added that attachment to the campus also grows among students.

By Han Kwi Hun PT

## PROFILE

## War veteran holds doctor's degree in her 80s

A high-strength structural adhesive attracted particular attention of visitors at the national exhibition of scientific and technological achievements in the field of finishing building materials, which was held in the Sci-Tech Complex in Pyongyang in 2018.

The cement can be applied for sticking such architectural constructional materials as granite or marble plate stones and tiles to any concrete surface without using reinforcement bars and can also be used as a concrete waterproof material.

Its adhesion strength grows with the passage of time after application and it can stick any stone plate weighing hundreds of kilograms to concrete surface at once.

"The raw materials and additives of the high-strength structural adhesive are all locally-available things," said developer Pak Pong Sil (pictured) proudly.

People highly appreciate the technical specifications of the adhesive, but what they admire more about is the developer herself.

She is not a building materials expert and she was awarded a doctorate for the study of the glue at the age of 84.

An ex-servicewoman during the Fatherland Liberation War, she was enrolled in



the chemistry department of Kim Il Sung University in 1952 in the height of the war.

The passionate student studied hard day and night, thinking about her comrades-in-arms who were shedding blood on the front line.

After graduating from the university with good marks, she became a researcher.

In the country, socialist construction was underway after postwar reconstruction, and in the stirring reality, Pak Pong Sil launched the study of the high-strength structural adhesive in order to contribute to increasing the speed of construction, though it was not her special subject.

"My mother used to say we should make everything the country needs and everyone

should do it," said Pak's son Rim Kyong Ho.

Pak devoted nearly 20 years to the research.

In 1975 she introduced her adhesive into the construction of the iron bridge over the Chongchon River.

Afterwards, she further perfected the adhesive to ensure its use in various structures and different construction conditions.

And more decades passed that way, and she was awarded her PhD in 2018 at the age of 84 for a thesis on the high-strength structural adhesive.

The finding associated with her whole life was of great help in speeding up the construction of monumental structures in different parts of the country, including the Monument to the Three Charters for National Reunification, skyscrapers and other high-rise apartment buildings on Ryomyong Street in Pyongyang and the Yangdok Hot Spring Resort, and is still being applied to many construction projects.

"Any research can be of true value when it brings substantial benefits to the country. If my research finding is of help to the country, I will be able to take pride in my life, I think," said Pak.

By Pang Un Ju PT

## DEVICE

## Mobile medical appliances introduced

Now mobile medical appliances newly developed by the Pyongyang medical appliances technology company are very popular with doctors and patients.

The mobile roentgen facility developed by them has already been rated highly on several occasions, especially in the National Festival of Science and Technology.

"This roentgen facility has relatively simple structure and is convenient to move, easy to use and very high in accuracy and reliability. We did health check-up for those in power plants and coal mines, and some households in a farm village in remote mountains and the response of residents was very good," said Kang Jong Chol, doctor at the Pukchang County People's Hospital in South Phyongan Province.

Engineers of the Pyongyang medical appliances technology company feel pride in it since they made it by relying on their own efforts 100 percent, from

programming to the making of devices.

The portable supersonic tachometer, prostate gland treatment device and other medical appliances developed by them are winning popularity in the clinical practice.

"Their medical facilities cost very lower than imported ones and have higher performance, so they give a big help for improving the quality of medical service," said Kim Kyong Jong, deputy director of the Pyongyang Maternity Hospital.

They are trying to establish the general medical service system for giving delivery assistance to women by further developing the existing childbirth monitor.

"The evaluation of research results depends on users, not on us. It is our research approach to carefully listen even to their trivial opinions and satisfy their demands," said Kim In Chol, director of the company.

By Min Chol PT



JON KWANG HUN

**A doctor examines a patient with a mobile X-ray.**

## HEALTHCARE

## Prolific mothers benefit from treatment cards

The medical benefits the Korean people enjoy gratis include that from the medical treatment card for prolific mothers.

"The state has issued a treatment card for each woman who has given birth to her third child since a few years ago," said Kang Un Chol, an official of the Pyongyang Municipal People's Committee.

The names of the husband and children in the school age are listed on the treatment card, along with that of such a woman with more than three children.

Under the general medical service system in the DPRK, primary treatment is given to patients through household doctors at clinics in their residential quarters and they

are referred to hospitals at a higher level or special hospitals according to the severity of illnesses.

According to Kang Un Chol, those with treatment cards, without passing through this system, can have treatment on a preferential basis at any hospitals they wish while receiving the normal preventive medical service of doctors in charge. Relevant units are obliged to provide all treatment conditions to the maximum to those with such cards.

Thousands of women and their family members in the city have so far received medical service since the card was issued.

By Ri Sung Ik PT



## TRAIT

# Woman ties knot after recovering her appearance in seven years



**Honoured disabled soldier Pak Su Ryon (second from right) in Sinchon County, South Hwanghae Province, smiles happy with the result of her seven-year cosmetic surgeries.**

A woman honoured disabled soldier in Sinchon County got married after recovering her original appearance in seven years.

Her name is Pak Su Ryon. She is an ordinary woman that can be seen everywhere in the DPRK. She became uncommon since she came to be a disabled

soldier after unexpectedly suffering injuries during her military service.

Everyone knew about her and showed concern for her.

"My daughter seldom went out due to her seriously deformed face and body. So villagers and her friends often visited our house. Newspapers

**"I'm happy. I have been able to be happy, not because I am a lucky woman, but I just live in the benevolent country, the DPRK."**

**Pak Su Ryon, honoured disabled soldier in Sinchon County, South Hwanghae Province**

were delivered first to our home and many unknown people often visited our home with tonics and special foods," recalled Su Ryon's mother O Kyong Ok.

She came to receive treatment at a central hospital in Pyongyang under the concern of many well-wishers. "Seven years have already passed,

though it seems to me it was the day before yesterday when I left for Pyongyang carrying daily necessities and precious medicines I received from home folks," said Su Ryon.

She recollected that the seven years, when she was reborn with her original features, were an unforgettable period.

It was the General Dental Hospital of the Ministry of Public Health which she arrived at first.

She had a facial plastic operation there.

She underwent surgery for several times to correct her eyes, nose, mouth and ears and doctors and nurses sat up all night by turns when she failed to go to sleep due to pains.

After having plastic operations at the General Dental Hospital of the Ministry of Public Health, she left for a sanatorium to receive a hot-spring cure.

Su Ryon received dozens of rounds of treatments including surgery at a hospital and sanatorium.

When they knew that she is a disabled soldier, everybody dedicated their sincerity while rendering active assistance to her.

Even other patients were very helpful for her recuperation.

She spent several years under the care of many well-wishers before being hospitalized at the Korea General Red Cross Hospital.

According to O Kyong Ok, the medical workers of the hospital, after carrying out the first examination of her, asked her to bring her best photograph.

She could hardly believe her ears, but they were serious.

The medical workers held lots of consultations and performed operations as they compared her photo with the conditions of the patient, finally bringing her back her original appearance.

After a while, she tied the knot with a university student who was an ex-serviceman.

Employees of the Sinchon County Food Administration Station, who admitted her as its employee after Su Ryon returned home as an honoured disabled soldier, hosted a glittering wedding ceremony for her and provided her with a new cosy house.

"I'm happy. I have been able to be happy, not because I am a lucky woman, but I just live in the benevolent country, the DPRK," said Su Ryon.

By Ri Sung Ik PT

## AMENITY

## Service complex draws more diners for specific service

Diners seek restaurants that give refreshing and various emotional feelings when humid and hot dog days come.

"People frequent dining rooms that give spacious, refreshing and emotional feelings which remind them of seascape or forest in this season," said Ok Hyon Gyong, reception team leader of the Ryugyong Service Complex in Pyongyang.

In the service complex there are dining rooms that render a variety of emotional feelings, especially the dining room representing a traditional tile-roofed house of the Korean nation covered by reed mat, the one giving a sense of stability while retaining the look of age in the overall component and the one that gives an impression of having a meal in the courtyard where the gentle breeze of summer blows.

"Today I had a dinner with my family at this service complex. I

was really happy as if all my family members had meals sitting in the courtyard in the moon-lit night. And I had cold green tea noodles, a speciality served at the end of different dishes, and it was really refreshing and clean. Next time, I will order a dining room that gives a refreshing feeling in the white beach," said So Hyon Il, a regular visitor to the complex.

Good dining environment is also promoted by excellent dishes.

According to attendant Kim Hyang Sim, the complex serves over 180 kinds of dishes. Such national foods as wreath *sinsollo*, steamed hairy crab of the East Sea of Korea and grilled beef and world-famous dishes like grilled lobster with sauce and sea food spaghetti are winning great popularity among clients.

"I have visited the hall which serves grilled meat on an iron plate on several occasions. It tastes very good. When we have

meals while listening to a kind cook's explanation about the dish and seeing dextrous stunts the cooks perform by using cooking tools including kitchen knife, it gives distinctive taste and good environment," said Pak Chol Hwan, another regular to the hall.

According to Ri Chun Son, director of the Ryugyong Exchange Centre who is manager of the service complex, the management principle of the service complex is to ensure unique taste, with pollution-free raw materials and seasoning as raw materials on the basis of growing demand of customers.

The complex has Ryugyong service vocational technical school for training young and talented cooks, and the cooks are required to pass a strict examination through 300-odd hours of lectures and practice.

By Han Kwi Hun PT



**A cook serves clients griddle grill at the Ryugyong Service Complex (left). A couple choose beer on the screen (right).**

## WBW

## Protect breastfeeding a shared responsibility

Breastfeeding is positively encouraged in the DPRK.

Breast milk is a major source of nutrition which is essential for the growth and development of babies and which reduces their disease incidence and mortality, and breastfeeding is very important in protecting the health of both babies and their mothers.

"Breast milk is rich in the physiological activators and immunity substances which boost the development of human brains and protect their digestive organs, and no milk product can substitute for it. It has scientifically been proved that breast milk is the best for babies' psychological and mental development," said Yu Hyang Suk, department chief of the Pyongyang Maternity Hospital.

Maternity hospitals in Pyongyang and provinces properly raise expectant and nursing mothers' awareness of breast milk as an essential nutrient for babies and make sure that they do the first breastfeeding within an hour after delivery, she added.

In particular, they ensure that colostrum which is secreted between the second and third days after delivery is fed to babies

as it is as good as the first preventive injection for the newborn since it contains immunity substances that protect babies from various infections.

The Ministry of Public Health launched the breastfeeding activity in 1996 in cooperation with UNICEF and the Pyongyang Maternity Hospital and all provincial maternity hospitals were awarded the certificate of Baby-Friendly Hospital in 2010.

This is the 29th year since the Baby-Friendly Hospital initiative was launched at the suggestion of UNICEF and WHO following the adoption of the INERCENT declaration in 1990. At present many public health institutions across the world are widely promoting the initiative.

The first week of every August was designated as the World Breastfeeding Week by UNICEF and the theme of the week for this year is "Protect Breastfeeding, A Shared Responsibility".

It is significant in feeding colostrum to all the newborn and ensuring exclusive breastfeeding for six months.

By Kwon Hyo Song PT



## CHINA-WEST

# Sinister scheme behind the anti-China smear campaign

Western countries ran an anti-China smear campaign over human rights as they found fault with the issues of Hong Kong, Xinjiang and Tibet at the 47th meeting of the UN Human Rights Council recently held in the form of video-conference in Geneva, Switzerland.

On the other hand, China and other developing countries in the period of the meeting disclosed serious human rights problems existing in Western countries and the falsehood of their human rights policy on several occasions, including a video-conference on the theme of “Western human rights: lack of international supervision and response”.

A spokesman for the Chinese Ministry of Foreign Affairs clarified the country’s stand towards human rights at a regular news briefing on July 12.

He said that Western countries have long been beset with such

serious human rights problems as racial discrimination, slave labour and gun violence and committed such criminal acts as the extermination of natives, illegal military intervention in the internal affairs of other countries and indiscriminate slaughter of civilians of other countries.

What is incomprehensible, he continued, is that Western countries, rather than trying to sincerely reflect on and address their human rights problems, are inventing lies to smear other countries, while posing as the “champion of human rights” and “human rights missionary”. It has been proved once again that it is a lie that they are concerned about human rights and their aim is to interfere in the internal affairs of other countries, he stressed, adding that what Western countries should actually do first is to fix their own serious human rights problems by discontinuing political manipulation and

abandoning deceitful double standards.

Western countries have long openly embellished, justified and defended the illegal acts of troublemakers in Hong Kong and reviled China’s Hong Kong policy over the legal action taken by the government and police of the Hong Kong Special Administrative Region against the agitators.

It can be said that Western countries are trying to interfere in the internal affairs of China as they find fault with the country over its internal issues in an attempt to put political pressure on it and realize their sinister design.

A Chinese Foreign Ministry spokesman said at a regular news briefing on July 14, the closing day of the 47th meeting of the UN Human Rights Council, that a handful of Western countries failed to win the sympathy of people as they told political lies and interfered in the internal affairs

of other countries at will under the banner of “human rights” at the UN Human Rights Council meeting, thereby already facing with the fierce opposition of the international community.

In actuality, over 90 countries expressed their support for China during the meeting through joint and separate remarks, joint letters and the like. They asserted the issues of Hong Kong, Xinjiang and Tibet belong to the internal affairs of China and the outside world should not interfere in them, expressing their opposition to the unfounded accusation against China based on political motivations and false information.

It is natural for China to reject the West’s slander over human rights and lay bare the poor human rights situation of Western countries and the falsehood of their human rights policy.

By Om Ryong PT

## PALESTINE-ISRAEL

## Anti-Israel sentiment runs high

The Aqsa Mosque and its surroundings have long been a sensitive flashpoint between Israelis and Palestinians. According to various restrictions, Jews were allowed to visit the “holy place”, but not to say prayers there. However, current Israeli Prime Minister Bennett said that both Jews and Muslims have the freedom to pray.

His argument meant that he acknowledged the freedom of Jews to hold prayer meeting and various other religious events in disregard of the restrictions imposed on them in the “holy place”, sparking strong discontent and opposition in the

Islamic world.

The situation gradually escalated into a bloodshed, arousing great concern in the international community.

Recently, Israeli extremists burst into the mosque and committed an outrage on the prayers.

As Muslims built a barricade around the “holy mountain” to keep them away from it, Israeli police broke it up by using tear gas and making hand grenades go off. Palestinians put up resistance against them throwing stones, which led to a clash. In the course of it, Israeli police arrested several Palestinians.

Turkey denounced Israel, saying its military occupation of East al Quds is contrary to international law and it committed an act against the historical status of the holy place.

The Turkish Foreign Ministry criticized the Israeli army, saying it broke the law by allowing the racist Jews to visit the holy place and violated human dignity by attacking and arresting Palestinian civilians including children and women.

Syria, Egypt, Jordan and other countries released statements to condemn it as inhuman and immoral criminal act.

Palestinian President

Abbas criticized Israel for its continued dangerous acts and the spokesman for Hamas denounced such Israeli act as terrorism against the world Muslims.

Israel’s true colours as a gangster have fully been revealed in its attempt to forcibly displace Palestinians from their native places and deprive them of their homes.

According to the UN on July 16, Israel destroyed over 470 houses of Palestinians in the West Bank this year, leaving 650 including 359 children homeless.

It is natural that the international community raises voices of protest against Israel, denouncing it as cancer of the Mideast peace.

By Choe Yong Nam PT

## PANDEMIC

## COVID-19 exacerbates situations in different countries

As highly infectious variant viruses are rapidly spreading around the world, many countries and regions are going through a serious anti-epidemic crisis once again.

According to foreign news reports, the number of daily infected cases in the UK, which stayed at a 20 000 level, has reached 30 000 again as it cancelled the anti-epidemic measure on July 19.

Its authorities admitted though belatedly that their country has

not yet got out of the crisis and are now taking an approach of dealing with the possible spread of the pandemic by the outright cancellation of the measure.

A new wave of COVID-19 has been triggered in Italy, where a variety of public gatherings took place on the occasion of the UEFA Cup.

In a week until July 27, the numbers of infected cases and deaths reportedly increased by 64.8 percent and 46 percent respectively as compared to the previous week.

Over 25 000 contracted cases and dozens of deaths are reported in France and Spain every day.

Such cases are also on the sharp increase in the Middle East, where the  $\delta$  mutant has begun to spread.

According to WHO, this virus was identified in 15 countries and regions of the Mideast.

More than 310 000 people are contracting the disease and over 3 500 others are dying there every week.

Turkey is suffering from

rapidly increasing viral infection due to a growing number of visitors on the occasion of the recent Muslim holiday.

The number of daily infected cases was 4 418 in early July, but increased to 22 161 on July 29.

Iraq also witnessed 13 259 daily contracted cases five days after the holiday, a record high since the outbreak of COVID-19.

Iran had a record daily infection as of July 27 as the  $\delta$  variant sparked another wave of the epidemic.

Experts express apprehension that the countries slackening tension in the anti-epidemic work are more likely to suffer a grave crisis as the infection is spreading mainly among young people.

By Song Jong Ho PT

## Briefly

## Russia

### State Duma official decries EU’s sanctions

The chairman of the International Affairs Committee of the Russian State Duma on July 29 said any approach of the West does not and will not affect the external political line of Russia.

His remarks came soon after a senior representative of the EU in charge of diplomatic and security policies said the sanctions against Russia is an effective approach.

The sanctions of the EU are failing to achieve their goal and this actually means that they are ineffective, he noted, adding the high-ranking EU diplomat should not comfort himself with a delusion.

## WHO

### Coronavirus may mutate into more dangerous forms

The director-general of the World Health Organization in a press conference on July 30 warned that the especially dangerous mutated viruses might appear in addition to  $\alpha$ ,  $\beta$ ,  $\gamma$  and  $\delta$  variants.

COVID-19 has mutated so far ever since the first notification of it, he said, asserting many more variants of it might come into being as long as the pandemic continues to be spread.

He attributed the rapid infection rate to the highly infectious  $\delta$  variant which has spread to 132 countries and regions.

He stressed that unless the check-up level is improved worldwide, it will be impossible to combat the pandemic and reduce the danger of appearance of new mutants.

## COVID-19

### Number of infected cases tops 200m

The number of infected cases of the novel coronavirus has exceeded 200 million worldwide.

According to foreign news reports, 200 214 194 people contracted the malignant virus and 4 258 199 died of the disease in 221 countries and regions as of 24:00 of August 3.

Although it took more than 12 months for the number of contracted cases to reach one hundred million since the first infected case was identified in late December 2019, it took less than seven months for the number to rise to 200 million.

## Japan

### Unemployment rate grows

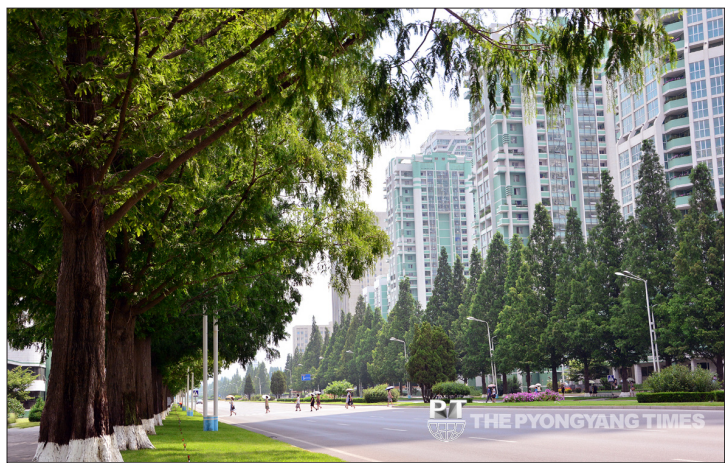
According to the Ministry of Internal Affairs of Japan on July 30, the number of the unemployed in the country increased by 110 000 in June as compared to the same month of last year, reaching 2.06 million.

THE PYONGYANG TIMES



## TREE

# Dawn redwoods add beauty to capital city



RYU KWANG HYOK

## Rows of dawn redwoods on Ryomyong Street.

Roadside trees add a special touch of beauty to each street of the capital city of Pyongyang.

Among them, dawn redwoods with good looks and high economic value are drawing the attention of pedestrians.

They provide cool shade in midsummer along walkways on some streets of Central and Taesong districts including Ryomyong Street in which residential quarters of scientists and lecturers nestle.

"When I walk under towering

dawn redwoods on my way to work and back home, it seems to clear my mind and remove fatigue," said Kim Chun Sil, a resident of Ryomyong-dong of Taesong District.

The street looks brighter as commuters go to work in great vigour under the trees, she added.

The tree grows 35 metres high and 2 metres in diameter in humid soil.

According to experts, it annually grows 1 to 1.5m and is

of high utility value as its trunk is thick and smooth along with thin branches.

It is hardly damaged by pine caterpillars and grows straight while taking deep roots. Its crown is conical and leaves are soft and turn yellow in autumn, serving as a good garden plant.

Propagation by seed makes the tree big in twelve years, whereas cutting enables it to become tall in only ten years.

It had been regarded as a fossil plant whose progenitor had been terminated before being discovered after a long lapse of time and has been bred on a large scale in the DPRK since the early 1960s.

"During the Fatherland Liberation War, a foreign country presented a dawn redwood to President Kim Il Sung as a gift and the tree was acclimatized. Now the trees are growing in all parts of the country and regarded as a good roadside tree species adding beauty to the scenery," said Jon Kwang Il, official of the Central Botanical Garden.

By Min Chol PT

## FOOD

# Terrapin dish good for retaining youth

From olden times, terrapin has been used as healthy food and a precious material for tonics for its high nutritive value and medicinal effects.

As modern science proved that it has anti-cancer effects, products made from terrapin are very popular and the demand for them is growing day by day.

Terrapin meat tastes sweet and is mild. Heat-processed terrapin meat helps strengthen body and mind.

In the DPRK, terrapin dishes were listed as national intangible cultural heritage elements and public catering facilities serve different kinds of terrapin dishes. In the areas where terrapins live terrapin dishes are also made to the traditional recipes.

Of late, full steamed terrapin served at the Delicacy House under the Okryu Restaurant has been registered as a famous national dish.

According to cook Myong Yong Chol, terrapin meat is known as the "elixir of life" as it neutralizes poison, helps regain vigour, restore vitality and produce blood, softens hard things and has restorative, antipyretic and cordial effects.

Full steamed terrapin is cooked as follows:

Draw blood from terrapin, remove its skin and shell and take out its entrails before washing it in cold water. Cut its belly out crosswise.

Cut white parts of Welsh onion into fine strips and chop the rest of it in lengths of 2 to 3cm. Slice ginger, bamboo sprouts and ham and cut *Lentinus edodes* in a fan shape.

Lay up terrapin spiced with salt, monosodium glutamate, chicken powder, powdered

pepper, sugar, sliced ginger, pieces of Welsh onion and cooking liquor for about three hours.

Steam the spiced terrapin in a pot for 40 minutes and add sliced *Lentinus edodes*, bamboo sprouts and ham on the back of it before steaming for another 10 minutes.

Put thick soy sauce and meat soup into the stock and boil it down to juice.

Serve the steamed terrapin on a plate and put fine strips of Welsh onion and coriander for garnish before pouring the juice over it.

Full steamed terrapin thus prepared is very much popular among the diners as a haute cuisine and healthy food.

By Ko Kwang Yon PT



Full steamed terrapin registered as a famous dish.

## SPORTS

# Paduk teams formed in provinces

Paduk (go) teams have been set up at paduk centres in provinces (cities under direct jurisdiction of the government).

This has provided a favourable condition for developing the intellectual sport associated with the wisdom and talents of the Korean nation onto a higher level.

In the past, paduk players belonged to each Taekwon-Do team, and the formation of independent paduk teams has made it possible to raise the status of the sports event, increase its scale and competitive power and further arouse public interest in and enthusiasm for it.

And good conditions have also been created for the long-

term development of the event including the training of reserves and arrangement of games.

The team that has been formed in the Pyongyang Municipal Paduk Centre consists of dozens of aces of senior and junior levels including Pak Un Hyang, Ri Kyong Guk, Kang Kil Hyok and Won Tae Bok, who are popular with citizens for having been successful in different games in the past.

The relevant department of the municipal people's committee directs efforts to solidifying the material foundations of the newly established team with deep concern with it.

By Sin Pyol PT



CHAE MYONG RIM

An instructor explains tactics to players at the Pyongyang Municipal Paduk Centre.

## BOOK

# Three classics of Koryo medicine

*Hyangyakjipsongbang*, *Uibangryuchwi* and *Tonguibogam* are considered the three medical classics of Korea.

*Hyangyakjipsongbang* published in 1433 was authored by well-known Koryo medical doctors Ro Jung Rye, Yu Hyo Thong and Pak Yun Dok. In 1431 they started writing the clinical collection with a total of 85 volumes by compiling successes and experience gained by Koryo medicine in Korea.

"It is a complete medical book peculiar to Korea which describes 694 kinds of Koryo medicinal materials that suit the physical constitution of the Korean people and can be obtained in Korea and 10 706 kinds of traditional Korean remedies including 1 479 elements of acupuncture and moxibustion," said Ri Song, director of the national classics institute of the Academy of Social Sciences.

*Uibangryuchwi* (1477) is an encyclopedia of traditional Korean medicine which was compiled by putting together the successes and experience Ro Jung Rye and other medical scholars attained while developing Koryo medicine and by referring to over 150 kinds of medical books at home and abroad.

The book has a three-volume introduction and 263 volumes dedicated to the particulars. Its extensiveness makes it one of the world's earliest encyclopedias showcasing the successes of Koryo medicine between the early 7th century and the early 15th century.

*Tonguibogam* (1613) consisting of 25 volumes is also an encyclopedic classic of medicine written by Ho Jun, a famous doctor at that time, who collected and integrated the successes in the development of Koryo medicine in Korea.

By Jong Chol PT

