

OAT CULTIVATION TECHNOLOGY

The article describes briefly the technology of oat growing. The soil conditions under which oats grow and grow well are shown. The recommendations for the preparation of the soil before sowing the crop are given. Also in the article the information on crops and the rate of oat seeding is indicated. The specified rules for oat fertilization and harvesting terms are specified. The use of oats is given.

Key words: *oats, soil, sowing, fertilizer, harvesting.*

У статті коротко описана технологія вирощування вівса. Показані ґрунтові умови, за яких овес добре росте і розвивається. Наведені рекомендації до підготовки ґрунту перед посівом культури. Також у статті вказана інформація про посів і норму висіву вівса. Вказані норми удобрювання вівса та строки збирання врожаю. Наведено використання вівса.

Ключові слова: *овес, ґрунт, посів, добриво, збирання врожаю.*

Oats is an important Cereal crop as well as fodder crop. Cultivation of Oat is similar as wheat crop. It is mainly grown in Temperate and Subtropical climates. It can also thrive well in high-altitude tropics. They are very popular due to their health benefits. Oat meal is very famous food. Oats is rich in proteins and fiber. They also help in weight loss, controlling blood pressure and for building strong immune system.

Oat can be cultivated on wide range of soils. However they thrive best on well drained loamy soils having good organic matter. The optimum soil pH range required is 5.0 to 6.5 for higher yield. Oat crop tolerates higher pH range soils than wheat or barley.

Land should be made weed free from previous planting or crop and it should be ploughed 6 to 7 times to achieve fine tilth stage. Weed management is not necessary in case if plants become successful to make a good crop stand. Weeds are less likely to occur in oats. 1-2 hoeing can be given as intercultural operations.

Generally, sowing is done by drilling method by keeping 20 cm to 30 cm distance between any two rows. An average seed rate required is about 70 to 80 kg per one hectare land.

Application of Farm Yard Manure along with chemical fertilizers would increase the quality and crop yield. For an irrigated crop, 40 to 45 kg of 'N' and 20 to 25 kg of P₂O₅ should be provided.

Usually, oats are cultivated as rainfed crop, in case of irrigated crop, it requires 1 irrigation for every 15 days after sowing the seeds.

Oat crop will become available for harvesting after 4 months of sowing. If it is for fodder use, 2 cuttings should be taken from 40 to 45 day's interval and leave for seed setting. In order to avoid grain shedding, crop harvesting should be done in early April month.

Harvest techniques are a matter of available equipment, local tradition, and priorities. Farmers seeking the highest yield from their crops time their harvest so the kernels have reached 35% moisture, or when the greenest kernels are just turning cream-colour. They then harvest by swathing, cutting the plants at about 10 cm (3.9 in) above ground, and putting the swathed plants into windrows with the grain all oriented the same

way. They leave the windrows to dry in the sun for several days before combining them using a pickup header. Finally, they bale the straw.

Oats can also be left standing until completely ripe and then combined with a grain head. This causes greater field losses as the grain falls from the heads, and to harvesting losses, as the grain is threshed out by the reel. Without a draper head, there is also more damage to the straw, since it is not properly oriented as it enters the combine's throat. Overall yield loss is 10–15% compared to proper swathing.

Historical harvest methods involved cutting with a scythe or sickle, and threshing under the feet of cattle. Late 19th- and early 20th-century harvesting was performed using a binder. Oats were gathered into shocks, and then collected and run through a stationary threshing machine.

Historical attitudes towards oats have varied. Oat bread was first manufactured in Britain, where the first oat bread factory was established in 1899. In Scotland, they were, and still are, held in high esteem, as a mainstay of the national diet.

In Scotland, a dish was made by soaking the husks from oats for a week, so the fine, floury part of the meal remained as sediment to be strained off, boiled and eaten. Oats are also widely used there as a thickener in soups, as barley or rice might be used in other countries.

Oats are also commonly used as feed for horses when extra carbohydrates and the subsequent boost in energy are required. The oat hull may be crushed ("rolled" or "crimped") for the horse to more easily digest the grain,[citation needed] or may be fed whole. They may be given alone or as part of a blended food pellet. Cattle are also fed oats, either whole or ground into a coarse flour using a roller mill, burr mill, or hammer mill. Oat forage is commonly used to feed all kinds of ruminants, as pasture, straw, hay or silage.

Winter oats may be grown as an off-season groundcover and ploughed under in the spring as a green fertilizer, or harvested in early summer. They also can be used for pasture; they can be grazed a while, then allowed to head out for grain production, or grazed continuously until other pastures are ready.

Oat straw is prized by cattle and horse producers as bedding, due to its soft, relatively dust-free, and absorbent nature. The straw can also be used for making corn dollies. Tied in a muslin bag, oat straw was used to soften bath water.

Oats are also occasionally used in several different drinks. In Britain, they are sometimes used for brewing beer. Oatmeal stout is one variety brewed using a percentage of oats for the wort. The more rarely used oat malt is produced by the Thomas Fawcett & Sons Maltings and was used in the Maclay Oat Malt Stout before Maclays Brewery ceased independent brewing operations. A cold, sweet drink called avena made of ground oats and milk is a popular refreshment throughout Latin America. Oatmeal caudle, made of ale and oatmeal with spices, was a traditional British drink and a favourite of Oliver Cromwell.

Oat extracts can also be used to soothe skin conditions, and are popular for their emollient properties in cosmetics.

Oat grass has been used traditionally for medicinal purposes, including to help balance the menstrual cycle, treat dysmenorrhoea and for osteoporosis and urinary tract infections.

Steamed oat noodles and rolls made from youmian.

In China, particularly in western Inner Mongolia and Shanxi province, oat (*Avena nuda*) flour called youmian is processed into noodles or thin-walled rolls, and is consumed as staple food.

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УПРОВАДЖЕННЯ ІННОВАЦІЙНИХ ТЕХНОЛОГІЙ З ФІЗИЧНОГО ВИХОВАННЯ У ПРОЦЕС ПІДГОТОВКИ СТУДЕНТІВ ДО МАЙБУТНЬОЇ ПРОФЕСІЙНОЇ ДІЯЛЬНОСТІ

At present, there are many educational concepts and technologies that have come to be replaced by traditional ones. New technologies and methods of teaching are used in physical education classes at higher educational institutions. Due to this, the competent development of physical abilities and the awakening of interest to students in physical education is realized, as well as their awareness of the need for appropriate physical training for the future profession.

В даний час склалося чимало освітніх концепцій і технологій, які прийшли на зміну традиційним. Нові технології і методики навчання застосовуються на заняттях з фізичного виховання у вищих навчальних закладах. Завдяки цьому досягається грамотний розвиток фізичних здібностей і пробудження інтересу у студентів до занять фізкультурою, усвідомлення ними необхідності відповідної фізичної підготовки до майбутньої професії.

Ключові слова: *інноваційні технології, студент, професійно-прикладна фізична підготовка, фізичні якості.*

Сучасне суспільство всіляко зацікавлене в якісній підготовці підростаючого покоління до продуктивної праці. Вся існуюча система навчання і виховання у вищих навчальних закладах спрямована, в основному, на підготовку студентської молоді до обраного фаху. Але повноцінне використання професійних знань і умінь можливо лише при хорошому стані здоров'я, високій працездатності молодих фахівців, які можуть бути придбані ними при регулярних і спеціально організованих заняттях фізичною культурою і спортом під час навчання у вузі. Необхідні для професійної підготовки фізичні якості й рухові навички формуються й удосконалюються в процесі сполучення професійного навчання зі спеціальною професійно-прикладною фізичною підготовкою.