

Chapter 1 : CORN IN THE BIBLE

Verse 5. - And he slept and dreamed the second time (that same night): and, behold, seven ears of corn came up upon one stalk, rank (i.e. fat) and calendrierdelascience.com clearly pointed to the corn of the Nile valley, the triticum compositum, which Bears seven ears upon one stalk.

Text Version Afrikaans Julie was growing more impatient by the minute. She had done all the things she was supposed to do, and now she was just waiting. After what seemed like hours of waiting, Julie heard a familiar rap-a-tap-tap at the front door. She jumped up and eagerly ran to open it. Two long years had gone by since Joseph interpreted the dreams of the butler and the baker, and everything was going along as usual in Egypt. Pharaoh was still the king. The butler was still serving Pharaoh, and Joseph? Well, Joseph was still in prison. Although God was blessing him and he had been put in charge of all the other prisoners, it was still dark and cold, and stinky, and not at all very pleasant. Meanwhile, back in the palace, King Pharaoh put on his snugly, warm pajamas and hopped into his fluffy, comfortable bed. After blowing out the candle and pulling the covers up around his chin, he quickly drifted off to sleep. In his dream, he was standing by the river. Seven good-looking, big fat cows came up from taking their baths in the river and went to graze in a nearby meadow. After that, seven ugly, skinny cows came out of the river and followed the fat cows. But instead of grazing in the meadow, the ugly, skinny cows ate up the fat cows. That was one, strange dream," he thought to himself. Then he plumped up his soft pillow, turned over, pulled the warm covers back up around his chin, and went back to sleep. And he dreamed again. This time he dreamed of a tall corn stalk. The stalk had seven ears of plump, ripe, yummy yellow corn. Then seven ugly, scrawny, skinny ears of corn grew on the stalk and ate up the big plump ears of corn. He tossed and turned the rest of the night, wondering about the two strange dreams. He called for all the magicians and the wise men of Egypt to come to the palace. When they all arrived, he gathered them in his huge dining room and gave them a meal. Then he told them his dreams. He was hoping that at least one of them would be able to tell him what the dreams meant. The butler was in the room serving when Pharaoh was relating his dreams. When you were upset with me and the baker and you had us put into prison, we both had dreams the same night. It happened just as he said! Up until now, I completely forgot about it! Pharaoh immediately sent for Joseph, and as you might imagine, Joseph was more than happy to finally get out of prison. He cleaned himself up, shaved, and made himself ready to stand before the king. Pharaoh came right to the point. I have heard that you can understand and interpret dreams. Joseph explained to Pharaoh, "The two dreams are really only one dream. God showed you what He is about to do in Egypt. The seven fat cows are seven years and the seven ears of good corn is the same seven years. The seven skinny cows are another seven years and the seven scrawny ears of corn are the same seven years. God is warning you ahead of time about what He is going to do. There will be seven years of abundance in the land of Egypt. Then there will be seven years of famine. The famine will be so bad that no one will even remember the years of abundance. God gave you two dreams because it is important and it will happen soon. I am the only one that will be greater than you. Then he gave him fancy clothes to wear and put gold chains around his neck. He gave him a special chariot to use and made him ruler over all Egypt, second in command after himself, King Pharaoh. Do all dreams have special meaning? What does "interpret" mean? What did the seven fat cows and the seven good ears of corn represent? What did the seven skinny cows and the seven bad ears of corn represent? What is a "famine"? How did Joseph know what the dreams meant? Other people may forget you, but God will never forget you and the good that you do.

Chapter 2 : Why Are They Called "Ears" of Corn? | Wonderopolis

A little more than a decade ago I saw a 6 ear stalk and a 7 ear stalk growing at Jay, OK. The corn was planted in holes in DeWitt Sunbelt landscape fabric and was drip irrigated.

And behold seven ears of corn came up upon one stalk. That this signifies memory-knowledges of the natural joined together, is evident from the signification of "ears," or spikes, of corn, as being memory-knowledges belonging to the natural; and from the signification of "upon one stalk," as being joined together; for in respect to their origin things on one stalk are joined together. The reason why "ears" or spikes of corn signify memory-knowledges, is that "corn" signifies the good of the natural n. The things in the inner memory, however, in so far as they partake of the light of heaven are not called memory-knowledges, but truths; nor can they be understood except by means of this light, or expressed except by forms of words, or ideas formed into words, by means of such things as are of heaven and its light. The memory-knowledges here signified by "ears," or spikes, are memory-knowledges of the church, in regard to which see above n. By the "seven kine" are signified the things of the interior natural called truths of the natural n. And it shall be in that day that a great trumpet shall be sounded, and they shall come that are perishing in the land of Assyria, and the outcasts in the land of Egypt; and they shall bow themselves to Jehovah in the mountain of holiness at Jerusalem Isa. For the earth beareth fruit of itself; first the blade, then the ear, after that the corn in the ear. But when the fruit is brought forth, immediately he putteth in the sickle, because the harvest is come Mark. Moreover the laws enacted in regard to gleanings Lev. That this signifies into which the things belonging to faith and charity could be applied, is evident from the signification of "fat," when predicated of the memory-knowledges signified by "ears" of corn, as being things capable of receiving the good of faith, consequently those into which the things of faith can be applied; for memory-knowledges are vessels, and when "fatness" is predicated of them, it signifies fitness for receiving such things as are of faith from charity; and from the signification of "good," when predicated of the memory-knowledges signified by "ears" of corn, as being those receptive of the good of charity, consequently those into which the things of charity can be applied. That "fat" has regard to the things of faith, and "good" to the things of charity, is in accordance with the constant usage everywhere in the Word, in which wherever two adjectives are applied to one thing, one involves what is of faith, and the other what is of charity; and this because of the marriage of truth and good in every detail of the Word n. That "fat" signifies the things of faith, and "good" the things of charity, is plain also from the foregoing parallel passages about the kine n. The memory-knowledges into which the things of faith and of charity can be applied are very many, such as all the memory-knowledges of the church which are signified by "Egypt" in a good sense n. And behold seven ears, thin. That this signifies memory-knowledges of no use, is evident from the signification of "ears," as being memory-knowledges n. For "thin" is here contrasted with "full," and that is said to be "full" in which there is use, or what is the same thing, in which there is good; for every good thing is of use; and therefore "thin" is what is of no use. The memory-knowledges of no use are those which have no other end than glory and pleasure. These ends are of no use, because they do not benefit the neighbor. And parched with the east wind. That this signifies full of cupidities, is evident from the signification of "parched with the east wind," as being to be consumed by the fire of cupidities. For the "east wind" and the "east," in the genuine sense, are love to the Lord and love toward the neighbor n. It is known that the sun of the world pours forth heat into its world, and into all the things therein; but that the sun of heaven pours heat into the whole heaven is not so well known. And yet this may be known, if anyone will reflect upon the heat that is within man, and that has nothing in common with the heat of this world, that is, the heat called vital heat. For this reason also desires, loves, and affections are spiritual heat, and are so called. That they are heat is very manifest, for heat is exhaled on all sides from living bodies, even in the greatest cold; and also when the desires and affections, that is, the loves, grow warmer, the body also grows warm in the same degree. This is the heat that is meant in the Word by "burning," "fire," and "flame;" and in the genuine sense it is heavenly and spiritual love, but in the opposite sense bodily and earthly love. From this it is evident that here by being "parched with the east wind" is signified being consumed by the fire of cupidities, and when predicated of

memory-knowledges, which are the "thin ears" of corn, there is signified that they are full of cupidity. Upon the beds of its shoots it shall wither Ezek. Similar also is the meaning in the internal sense of the "east wind" by which locusts were produced, and by which they were driven into the sea Exod. Sprung up after them. That this signifies appearing near, is evident from the signification here of "springing up," as being to appear; and from the signification of "after them," as being near, or in the boundary, just as is signified by the evil and lean kine coming up "after them," that is, after the beautiful and fat kine n. That "after them" means near, is because "after" denotes what is successive in time; and in the spiritual world, and consequently in the spiritual sense, there is no notion of time, but instead of it the kind of state that corresponds. And the thin ears swallowed up the seven fat and full ears. That this signifies that the memory-knowledges of no use banished the good memory-knowledges, is evident from the signification of the "thin ears," as being memory-knowledges of no use n. The good memory-knowledges were banished by those of no use, or truths were banished by falsities, n. So also is it in the spiritual world: The one banishes the other, for they are opposites. The reason is that falsities are from hell and truths are from heaven. It sometimes appears as if falsities and truths are in one subject; but these are not falsities that are opposite to the truths in him, but are those which are associated by applications. The subject in whom truths, and at the same time falsities which are opposite to them, subsist, is called "lukewarm;" and the subject in whom falsities and truths are mingled is called "profane.

Chapter 3 : Ear of Corn - Official 7 Days to Die Wiki

In Navezgane the Ear of Corn can be no longer be found at the Farm North-West of Diersville on Coronado Rd. It is all dead as of last console update. Ear of Corn can be found scattered throughout the Plains Biome or planted on plots inside cities in random gen.

Birds and four-footed visitors who want to share your corn harvest can be kept out with any number of scare-off devices and fences. Prevention can be percent of the cure. Healthy plants can withstand nibbling or insect damage better than weakened ones. A very important step you can take for disease-free corn is to clean up all the cornstalks as soon as the harvest is over. Till healthy cornstalks into the soil as additional organic matter, or, if you prefer, shred, compost or simply discard them. Dealing with old cornstalks will prevent many diseases and insects from overwintering, which is crucial to the health of crops grown in future seasons. It causes dwarfing and wilting of the plants, and the tassels often develop early and die without completing pollination. Leaves develop yellow-brown streaks and wavy edges. The leaves of young plants may dry out, and the stem eventually dies. This wilt is often characterized by a yellow slime on the inner husks and in the stem. Bacteria overwinter in the gut of the corn flea beetle. This disease is prevalent after a mild winter, when more disease-carrying flea beetles have survived. To prevent an outbreak, clean up all crop residues, rotate your corn crop each year, plant resistant varieties and control corn flea beetles. Root Rot is caused by fungi in the soil and shows up as stunted plants or irregular plants with rotten roots. You risk root rot when planting seed in cold, damp soil. Smut is edible and actually is sought after by gourmet chefs. In the early stages of the infection, grayish white, spongy growths called "galls" usually appear on the corn ear or tassel. As these galls ripen, they turn black and eventually burst open, releasing powdery spores that spread the smut. The disease thrives in hot, dry weather and often infects weak or injured plants first. To prevent, rotate crops, and if you notice any galls, pick them and burn them before they blacken and burst. Southern Corn Leaf Blight is another fungal disease. It is characterized by tan streaks or lesions on the leaves, and may cause early seedling death, mold-covered kernels or rotten cobs. A similar disease, northern corn leaf blight, results in grayish green or tan lesions on the leaves and reduced yields. These fungi overwinter in infected seed and plant debris. Plant resistant varieties, using healthy, certified disease-free seed. Rotate crops and remove or till under crop debris. If the disease has been severe in your area, check with your local Extension agent for a preventive fungicide program. In this blight reached epidemic proportions, wiping out 15 percent of the total United States corn crop, for an estimated loss of one billion dollars. Insects These are the insects most likely to affect corn, along with the best control measures for the home gardener. Corn earworm is also known as the tomato fruitworm or cotton bollworm. This 1- to 2-inch-long caterpillar ranges from light green to purplish brown. Moths lay eggs on corn plants in early summer and larvae feed first on the silks, then on the kernels at the tip of each ear. The insect can prevent pollination, and it opens kernels to fungus invasion. To discourage this pest, select varieties with tightly closed husks. Earworms can be controlled somewhat by squirting mineral oil into each ear after silks have started to dry, using half a medicine dropper per ear. You can also spray the plant and silks with Bt. If earworm damage occurs, clip off the tip of the ear and any affected kernels. The rest of the ear should be fine to eat. European corn borer is a 1-inch-long tan or brown caterpillar sporting rows of dark brown spots and a dark brown head. The moths fly mostly at night and lay eggs on the undersides of corn leaves in early summer. The hatched larvae bore into cornstalks and ears to feed. Broken tassels, bent stalks and "sawdust" around corn are all signs of borer damage. If you catch it in time, you can often cut out the borer from the stalk with no permanent damage. To prevent infestation, treat ears and leaves with Bt as soon as silk has partially emerged. Spray with an organic pesticide at five-day intervals from the time you first spot borer activity or when the tassels begin appearing. Make at least two applications for best results. Be sure to till or spade under crop residues at the end of the season so the borer has no place to overwinter. Corn Sap Beetles are small, black beetles that spawn maggot-like larvae that eat into the kernels of roasting corn. The beetles are attracted to the scent of damaged corn, so preventing feeding by other pests helps keep them at bay. To prevent, plant resistant varieties and clean up all crop residues. Southern corn rootworms are small, yellowish grubs of the

spotted cucumber beetle. They weaken corn plants by feeding on roots, causing the stalks to blow over easily in wind or heavy rain. Adults lay eggs around roots of cornstalks in the fall. The eggs hatch in spring. You can avoid damage from corn rootworms by tilling under cornstalks and rotating crops each year. Corn Root Aphids are tiny, light green insects that feed on corn roots, causing the plants to be stunted and yellowed. The aphids overwinter in the nests of cornfield ants. The best way to control this pest is to plow the garden in the fall, destroying ant nests. Corn Flea Beetles are small but dangerous. The pests abound during cool, wet periods and after mild winters. They hibernate in weeds and plant debris over the winter, so keep the garden and surrounding areas clean. Many of the later-maturing white corn varieties are resistant to wilt. To repel flea beetles, sprinkle a light dusting of wood ash over plants and soil. Wireworms are slender, yellowish or brown larvae of click beetles. They damage corn plants by feeding on the roots. These pests are most often present in newly worked sod. Rotate crops and till or spade your garden thoroughly in the fall. Heavy infestations may require soil treatment with beneficial nematodes before planting. Seed corn maggots are cream-colored and legless. When early corn is planted in cool, wet soil, the slower germination makes the seeds more susceptible to maggot attack. If maggots are a problem in your area, delay planting until weather warms. Uninvited Guests One of the biggest challenges in growing corn is keeping it for yourself. Fortunately, most of the animals and birds that invade corn can be outwitted. Here are some ideas to keep corn free of uninvited guests. Some of these tricks can solve pest problems in other parts of your garden, as well. Raccoons are well known for their expertly timed raids on the sweet corn patch. Many people start their tales of raccoon damage with the words, "The night before we were going to pick the first, ripe, sweet corn -. Actually, raccoons are attracted by the smell of the sweet corn tassels. There are many old-time tricks to keep raccoons out of the corn patch, but only one rule: Put your defense in action before the raccoons can set a single foot in your garden. Once an animal has tasted your sweet corn, it will be almost impossible to keep it out of the garden. To protect sweet corn, try these ideas: Other Critters Some of the methods that keep raccoons out will also work for skunks, woodchucks, deer and squirrels. An electric fence is the best all-around pest barrier, except when it comes to squirrels. One way to keep squirrels away is to sprinkle red pepper or Tabasco sauce on some ears on the outer rows of the corn. Some of these methods work some of the time, so try anything you think might work for you. Using several methods in succession or simultaneously increases your chances of success. Birds Unlike four-footed critters, birds do as much good in the garden by eating insect pests as they do damage, but some species have a weakness for corn. There are a few ways to keep birds away from the corn at each stage of the game. After planting, cover each row with a long strip of chicken wire, bending it in an inverted U-shape about 10 inches high in the middle. The close mesh keeps out prying beaks, and by the time the seedlings touch the top of the wire, the birds are no longer interested. You can remove the wire and store it for the next season. However, there are other effective ways to scare birds away. Try putting a realistic life-size plastic owl on a tall post near the corn. The owl will ward off birds, and may help with neighborhood mice and rabbits as well. Moving the owl frequently will keep critters from getting used to it too quickly. Then you need an effective bird-scarer or chaser. Rig up noisemakers or aluminum pie plates around the corn to frighten them. A cat or dog near the garden often does the trick.

Chapter 4 : Corn Diseases, Insects, and Pests - calendrierdelascience.com

I first read this book in third grade. Our teacher (the author's daughter) provided each of her students with a copy for Christmas. It was amazingly written and captured the attention of ALL the students.

He was standing by the Nile, when out of the river there came up seven cows, sleek and fat, and they grazed among the reeds. After them, seven other cows, ugly and gaunt, came up out of the Nile and stood beside those on the riverbank. And the cows that were ugly and gaunt ate up the seven sleek, fat cows. Then Pharaoh woke up. He fell asleep again and had a second dream: Seven ears of corn, healthy and good, were growing on a single stalk. After them, seven other ears of corn sprouted—thin and scorched by the east wind. The thin ears of corn swallowed up the seven healthy, full ears. How frequently did he have a vivid dream? If so then in two years he had had twelve vivid dreams, but not once had the dream made him think of a man languishing in prison who had once given him hope when he was released from incarceration with his life, not on any one of those twelve occasions had he spared a thought for the helpful young Hebrew. The cupbearer seems to have been a self-centred and unkind man, and yet he was the very man God appointed to be the means through whom deliverance from prison and exaltation would come to Joseph. God can use the most crooked branch to strike a straight blow. And seven heavy ears of corn standing swaying in the breeze ready for harvest but then seven withered scorched ears blasted by the east wind and they devour the full heads of grain—tell me what does it mean? Interpret to me my dreams! Pharaoh was threatening, intimidating, winding himself up into a rage, complaining that he employed all these magicians and wise men and they were a dead loss. He was thinking of hanging the lot of them so that the birds of the air could feed on them. They could tell him what the symbolism meant of cows, of the Nile, of the number seven, of something eating something else, of corn, etcetera, etcetera, plenty of words to the rage of Pharaoh. Then they returned and brought him a report, and they quoted all the traditions and writings of the sages, they deciphered hieroglyphics, they referred to historical precedents, but they were all stumped. All the wisdom of Egypt, the greatest power of the world, could not interpret the message that God had given the king. Then it was that the cupbearer remembered Joseph who had interpreted his dream so accurately, and also the dream of the baker when they had been in prison together two years earlier. Pharaoh was once angry with his servants, and he imprisoned me and the chief baker in the house of the captain of the guard. Each of us had a dream the same night, and each dream had a meaning of its own. Now a young Hebrew was there with us, a servant of the captain of the guard. We told him our dreams, and he interpreted them for us, giving each man the interpretation of his dream. And things turned out exactly as he interpreted them to us: When he told Pharaoh this Joseph was immediately sent for. He trimmed his hair, shaved and put on clean clothes and finally stood before Pharaoh. Egyptians liked clean shaven men; sometimes the men even shaved their heads, whereas the Semites all had beards. So it was a matter of utter indifference to Joseph, but knowing the traditions of the Egyptians he shaved so that there would be no unnecessary offence or barrier between him and Pharaoh. Let me turn this first in this direction. Joseph had to stay in prison for two more years, two long years. Providence rarely works out like a machine that dispenses snacks where you drop in your pound and push the numbers and out come a bar of chocolate or a can of coke. Joseph had hit all the right buttons in prison and asked the butler to remember him to Pharaoh but nothing had come of it for two years. It was essential that Joseph not only be released but be brought into the presence of Pharaoh to make an impression under God on the king. At any time God could have sent those two dreams to Pharaoh but he waited two years, and he did not give Joseph any reason for the delay. God saw fit not to disclose this to him. Joseph had to walk by faith. You unbelievers may hate him, and have nothing but contempt for a God who has permitted pain to come into your life. You are without hope as a rebel against the Lord. What unhappy homes they lived in! Judge not the Lord by feeble sense but trust Him for His grace; Behind a frowning providence He hides a smiling face. So we are to wait patiently on him, our loving Saviour who has never wronged us or ours in anything he has done or failed to do. Joseph waited two more years before he was exalted to the heights for the rest of his long life. The first meeting between Joseph and Pharaoh is recorded here in Scripture and it has such a beauty about it. Then the Confession goes on to say that all

these features are abundant evidence that the Bible is the Word of God. Sometimes you read Scripture and it moves you and it warms your heart so much so that spontaneously you pick it up and hug it. But I have heard it said of you that when you hear a dream you can interpret it. This was the first conversation these two men had and for the next thirty or forty years they talked together almost every day in growing trust and affection as they ruled the greatest nation in the world. Jacob tells him that he is years old. I have no ability in myself to interpret dreams. I am not like the wise men and magicians and diviners of Egypt. Joseph, from the beginning was taking the initiative even with the king and establishing the foundation of his relationship and friendship with Pharaoh. He was nailing his colours up from the beginning; he showed Pharaoh whose he was and whom he served and that there could never be misunderstanding or compromise over this: It is to do with the original hearers of this book of Genesis, when Moses read it to them. These kings had absolute authority in the land and they were worshipped as gods by the Egyptians, and many of the Israelites were afraid of them. So here Moses is putting the record straight. Pharaoh was impotent in understanding the revelation and the providence of God. Our God is in charge of our future. He knows exactly what is going to happen in the next fourteen years of our lives; maybe we are to have seven years of plenty and then seven years of famine. God has decreed it all. He has appointed the day of our deaths, and we even know what happens after death, because God has told us. The only reason I stand here in the pulpit and teach the word and you sit and hear that word is that we all believe that our God lives and is not silent, that he has spoken to us, and his words are captured for us here in the inspired Bible, and that he raises up preachers whose calling is to explain and apply the Scriptures to the church week by week, in fact this is the climax of our worship, after we have sung and prayed to the Lord, then God chooses to speak to us through the book. Nail your colours up. So we see the god of Egypt is getting smaller, and smaller, and smaller, and smaller, while the God of Joseph is more and more and more revealed in his sovereignty and exaltation. Notice especially at verses 25 and 28 where Joseph stresses this fact. The dreams are repeated for a specific reason, to underline their utter veracity and so their importance; they are referring to the same events. Unless Pharaoh missed the point, preacher Joseph is going to say it at least one more time. Joseph even explains the reason why God sent this same message twice, by the cows and by the heads of grain: I can hear it. The seven good years are even now underway, and so you have to make preparation immediately. The Lord Jesus told his disciples and he tells us that we are not to be fearful when we face a hostile group of men, when we are put on trial and our life is at stake. It will be given to us what we are to say. The Holy Spirit will help. We will not be left to stammer depending only on our wits. There must in this fallen world be a mixture of testing and blessing, of comfort and trial. We live our lives under the curse as part of a fallen and rebellious humanity and so there will be heartache in this fallen world, but God is in control and he has promised to work all things together for our good. Joni Eareckson Tada, the paraplegic Christian, said that without a doubt what has helped her most in accepting and dealing with suffering was her view of Almighty God, learning who he is and knowing that he is in control. On the contrary we understand the seven years of trial by beginning with our view of God, by reasoning from the nature of the sovereign loving God to such times and such events. This is the God that can bring mighty Japan to her knees in a day by earthquake and tsunami and nuclear contamination. Surely God is in the facts of history as certainly as he is in the march of the seasons. So be encouraged, men and women, what power the Lord has to defend you, all wisdom to direct you, all mercy to pardon you, all grace to enrich you, all righteousness to clothe you, all goodness to supply all your needs, and all happiness to crown you! Little wonder that Joseph, knowing this, was so bold as he spoke to the king! Here is John Wayne coming to the rescue of the beleaguered wagon train! God and his prophet Joseph have come to rescue the helpless god of Egypt vv. Pharaoh, the god-king has been humbled by the striking dreams that neither he nor any one of the wise men of Egypt can interpret, and now he is being furthered humbled by the advice he is being given by a Hebrew slave who has spent perhaps as much as ten years in his own prison. Does Pharaoh realise the implications of this? Joseph will tell him. It certainly means this at least, that Pharaoh look for a man who is discerning and wise to set over the land of Egypt. There are going to be seven years of plenty, but they will be followed by seven lean and fearful years with famine everywhere. Seven whole years of famine covering the earth! Then, in an amazing speech, Joseph tells Pharaoh what he has to do next! It is an amazingly detailed

economic-agricultural measure. Let Pharaoh appoint commissioners over the land to take a fifth of the harvest of Egypt during the seven years of abundance. They should collect all the food of these good years that are coming and store up the grain under the authority of Pharaoh, to be kept in the cities for food. I think he was totally oblivious to the option. At this moment he had sprung into his instinctive Old Testament Christian response to the sovereign revelation of God. This, this, this, this. Suddenly the future is decided for Pharaoh. What started as a terrible night and a dark and fearful day has been transformed. This man is a messenger of God and the message he brings is very simple.

Chapter 5 : SAB: Genesis 41

Read page 2 of the I am but one man with seven ears of corn. discussion from the Chowhound Home Cooking food community. Join the discussion today.

Agronomic data were supplemented by botanical traits for a robust initial classification, then genetic, cytological, protein and DNA evidence was added. Now, the categories are forms little used, races, racial complexes, and recently branches. The combined length of the chromosomes is cM. Some of the maize chromosomes have what are known as "chromosomal knobs": Individual knobs are polymorphic among strains of both maize and teosinte. Barbara McClintock used these knob markers to validate her transposon theory of "jumping genes", for which she won the Nobel Prize in Physiology or Medicine. Maize is still an important model organism for genetics and developmental biology today. The total collection has nearly 80, samples. The bulk of the collection consists of several hundred named genes, plus additional gene combinations and other heritable variants. There are about chromosomal aberrations e. Genetic data describing the maize mutant stocks as well as myriad other data about maize genetics can be accessed at MaizeGDB, the Maize Genetics and Genomics Database. The resulting DNA sequence data was deposited immediately into GenBank, a public repository for genome-sequence data. Much of the maize genome has been duplicated and reshuffled by helitrons – group of rolling circle transposons. This randomly selects half the genes from a given plant to propagate to the next generation, meaning that desirable traits found in the crop like high yield or good nutrition can be lost in subsequent generations unless certain techniques are used. Maize breeding in prehistory resulted in large plants producing large ears. Modern breeding began with individuals who selected highly productive varieties in their fields and then sold seed to other farmers. These early efforts were based on mass selection. Later breeding efforts included ear to row selection C. Shull, and the highly successful double cross hybrids using four inbred lines D. University supported breeding programs were especially important in developing and introducing modern hybrids Ref Jugenheimer Hybrid Maize Breeding and Seed Production pub. By the s, companies such as Pioneer devoted to production of hybrid maize had begun to influence long term development. Since the s the best strains of maize have been first-generation hybrids made from inbred strains that have been optimized for specific traits, such as yield, nutrition, drought, pest and disease tolerance. Both conventional cross-breeding and genetic modification have succeeded in increasing output and reducing the need for cropland, pesticides, water and fertilizer. The program began in the s. Transgenic maize Genetically modified GM maize was one of the 26 GM crops grown commercially in Origin of maize and interaction with teosintes Maize is the domesticated variant of teosinte. The difference between the two is largely controlled by differences in just two genes. This theory was further confirmed by the study of Matsuoka et al. It has undergone two or more domestications either of a wild maize or of a teosinte. The term "teosinte" describes all species and subspecies in the genus *Zea*, excluding *Zea mays* ssp. It has evolved from a hybridization of *Z.* In the late s, Paul Mangelsdorf suggested that domesticated maize was the result of a hybridization event between an unknown wild maize and a species of *Tripsacum*, a related genus. Teosinte and maize are able to cross-breed and produce fertile offspring. A number of questions remain concerning the species, among them: *Zea* originated, how the tiny archaeological specimens of 8,000 BC could have been selected from a teosinte, and how domestication could have proceeded without leaving remains of teosinte or maize with teosintoid traits earlier than the earliest known until recently, dating from ca. The domestication of maize is of particular interest to researchers – archaeologists, geneticists, ethnobotanists, geographers, etc. The process is thought by some to have started 7, to 12, years ago. Research from the s to s originally focused on the hypothesis that maize domestication occurred in the highlands between the states of Oaxaca and Jalisco, because the oldest archaeological remains of maize known at the time were found there. Archaeobotanical studies, published in, point to the middle part of the Balsas River valley as the likely location of early domestication; this river is not very long, so these locations are not very distant. Stone milling tools with maize residue have been found in an 8, year old layer of deposits in a cave not far from Iguala, Guerrero. Doebley was part of the team that first published, in, that maize had been domesticated only

once, about 9,000 years ago, and then spread throughout the Americas. Archaeological remains of early maize ears, found at Guila Naquitz Cave in the Oaxaca Valley, date back roughly 6,000 years; the oldest ears from caves near Tehuacan, Puebla, 5,000 B. Before Present [14] Maize pollen dated to 7,000 B. Maize was the staple food, or a major staple "along with squash, Andean region potato, quinoa, beans, and amaranth" of most pre-Columbian North American, Mesoamerican, South American, and Caribbean cultures. The Mesoamerican civilization, in particular, was deeply interrelated with maize. Its traditions and rituals involved all aspects of maize cultivation "from the planting to the food preparation. It is unknown what precipitated its domestication, because the edible portion of the wild variety is too small, and hard to obtain, to be eaten directly, as each kernel is enclosed in a very hard bivalve shell. In 1830, George Beadle demonstrated that the kernels of teosinte are readily "popped" for human consumption, like modern popcorn. However, studies of the hybrids readily made by intercrossing teosinte and modern maize suggest this objection is not well founded. Spreading to the north Around 4,000 B. In particular, the large-scale adoption of maize agriculture and consumption in eastern North America took place about 1,000 A. Native Americans cleared large forest and grassland areas for the new crop. Its root system is generally shallow, so the plant is dependent on soil moisture. As a plant that uses C4 carbon fixation, maize is a considerably more water-efficient crop than plants that use C3 carbon fixation such as alfalfa and soybeans. Maize is most sensitive to drought at the time of silk emergence, when the flowers are ready for pollination. In the United States, a good harvest was traditionally predicted if the maize was "knee-high by the Fourth of July", although modern hybrids generally exceed this growth rate. Maize used for silage is harvested while the plant is green and the fruit immature. Sweet corn is harvested in the "milk stage", after pollination but before starch has formed, between late summer and early to mid-autumn. Field maize is left in the field until very late in the autumn to thoroughly dry the grain, and may, in fact, sometimes not be harvested until winter or even early spring. The importance of sufficient soil moisture is shown in many parts of Africa, where periodic drought regularly causes maize crop failure and consequent famine. Although it is grown mainly in wet, hot climates, it has been said to thrive in cold, hot, dry or wet conditions, meaning that it is an extremely versatile crop. Maize provided support for beans, and the beans provided nitrogen derived from nitrogen-fixing rhizobia bacteria which live on the roots of beans and other legumes; and squashes provided ground cover to stop weeds and inhibit evaporation by providing shade over the soil. Modern technique plants maize in rows which allows for cultivation while the plant is young, although the hill technique is still used in the maize fields of some Native American reservations. When maize is planted in rows, it also allows for planting of other crops between these rows to make more efficient use of land space. In North America, fields are often planted in a two-crop rotation with a nitrogen-fixing crop, often alfalfa in cooler climates and soybeans in regions with longer summers. Sometimes a third crop, winter wheat, is added to the rotation. Many of the maize varieties grown in the United States and Canada are hybrids. Often the varieties have been genetically modified to tolerate glyphosate or to provide protection against natural pests. Glyphosate is an herbicide which kills all plants except those with genetic tolerance. This genetic tolerance is very rarely found in nature. In the midwestern United States, low-till or no-till farming techniques are usually used. In low-till, fields are covered once, maybe twice, with a tillage implement either ahead of crop planting or after the previous harvest. The fields are planted and fertilized. Weeds are controlled through the use of herbicides, and no cultivation tillage is done during the growing season. This technique reduces moisture evaporation from the soil, and thus provides more moisture for the crop. The technologies mentioned in the previous paragraph enable low-till and no-till farming. Weeds compete with the crop for moisture and nutrients, making them undesirable. Harvesting Harvesting maize, Jones County, Iowa Before the 20th century, all maize harvesting was by manual labour, by grazing, or by some combination of those. Whether the ears were hand-picked and the stover was grazed, or the whole plant was cut, gathered, and shocked, people and livestock did all the work. Between the 1800s and the 1900s, the technology of maize harvesting expanded greatly. For small farms, their unit cost can be too high, as their higher fixed cost cannot be amortized over as many units. This involved a large numbers of workers and associated social events husking or shucking ears. From the 1900s onward, some machinery became available to partially mechanize the processes, such as one- and two-row mechanical pickers picking the ear, leaving the stover and corn

binders, which are reaper-binders designed specifically for maize for example, Video on YouTube. The latter produce sheaves that can be shocked. By hand or mechanical picker, the entire ear is harvested, which then requires a separate operation of a maize sheller to remove the kernels from the ear. Whole ears of maize were often stored in corn cribs, and these whole ears are a sufficient form for some livestock feeding use. Today corn cribs with whole ears, and corn binders, are less common because most modern farms harvest the grain from the field with a combine and store it in bins. The combine with a corn head with points and snap rolls instead of a reel does not cut the stalk; it simply pulls the stalk down. The stalk continues downward and is crumpled into a mangled pile on the ground, where it usually is left to become organic matter for the soil. The ear of maize is too large to pass between slots in a plate as the snap rolls pull the stalk away, leaving only the ear and husk to enter the machinery. The combine separates out the husk and the cob, keeping only the kernels. When maize is a silage crop, the entire plant is usually chopped at once with a forage harvester chopper and ensiled in silos or polymer wrappers. Ensiling of sheaves cut by a corn binder was formerly common in some regions but has become uncommon. Worldwide maize production For storing grain in bins, the moisture of the grain must be sufficiently low to avoid spoiling. If the moisture content of the harvested grain is too high, grain dryers are used to reduce the moisture content by blowing heated air through the grain. This can require large amounts of energy in the form of combustible gases propane or natural gas and electricity to power the blowers. Maize production [82].

Chapter 6 : Seven ear of corn on one stalk! | Welcome to the Homesteading Today Forum and Community

But last night, I had three ears left so I decided to do a little research to see what could be made from those three ears. Here are seven ideas to turn that leftover corn on the cob into.

Chapter 7 : How to Store Corn on the Cob | calendrierdelascience.com

Spiritual Meaning of GENESIS previous - next - text - summary - Genesis - BM Home - Full Page. AC Verses And he slept and dreamed a second time, and behold seven ears of corn came up on one stalk, fat and good. And behold seven ears thin and parched with the east wind sprung up after them.

Chapter 8 : Spiritual Meaning of GENESIS

The seven cows and seven ears of corn were seven years, the fat ones very fertile years of superabundance, the lean ones very barren years of famine; the latter would follow the former over the whole land of Egypt, so that the years of famine would leave no trace of the seven fruitful years; and, "for that the dream was doubled unto Pharaoh.

Chapter 9 : Vintage CAST IRON CORN BREAD PAN Skillet Mold 7 Ears Muffin Baking | eBay

The average ear of corn has kernels. You can find corn in more than 3, products on your grocery shelves, including cereal, peanut butter, and soft drinks. Corn is grown on every continent except Antarctica. More than 50 percent of the corn grown in the United States becomes food for livestock. The main ingredient in most dry pet food is corn.