

Chapter 1 : Guo Bao Rou: The Origin of Sweet & Sour Pork - EF English First

David George Gordon suggests adding canned pineapple chunks, tomatoes and sugar for a sweet-and-sour version. Another approach: Briefly deep-fry the pupae until they're crisp and serve them with your choice of dipping sauce.

Images Egg Female silkworm lays about eggs at a time. It lays eggs on the leaves of mulberry trees. The eggs are covered with gelatinous secretion by which they stick to the leaves. Female moth silkworm lays eggs and die after laying eggs as it does not eat anything. The eggs are kept in a cool place so that it can be stored for a long time. In a favourable condition, they hatch into larva. Silk The cocoon is made of one thread of raw silk from to meters to feet long. The fibers are very thin. About 2, to 5, cocoons are needed to make a pound of silk. If the animal is allowed to survive after spinning its cocoon, it will make a hole in the cocoon when it exits as a moth. This would cut the threads and ruin the silk. Instead, silkworm cocoons are thrown into boiling water, which kills the silkworms and also makes the cocoons easier to unravel. Often, the silkworm itself is eaten. The adult silkworms moths cannot fly. The silkworm-moths have wings about 2 inches wide and a white hairy body. Females are about two to three times bigger than the males, but similarly colored. Adult silkworms have small mouths and do not eat. According to the book written in the 13th century, she was drinking tea under a tree when a cocoon fell into her tea. She picked it out and as it started to wrap around her finger, she slowly felt something warm. When the silk ran out, she saw a small cocoon. In an instant, she realized that this cocoon was the source of the silk. She taught this to the people and it became common. There are many more legends about the silkworm. Khotan is an oasis, located on the southern edge of Taklamakan Desert, and was one of the first places outside of inland China to begin cultivating silk. In the far past, the Chinese guarded their knowledge of silk. It is said that a Chinese princess smuggled eggs to Khotan, hidden in her hair. After this, the way to cultivate silk was transmitted to the Western Asia, and also Europe. The Japanese also love silk and started cultivating and weaving silk in the earlier age than the western countries. According to the Records of the Three Kingdoms, a history book published in the 3rd century, Japan exported silk to Wei, a kingdom in the northern part of the China mainland, in the 2nd century. It takes silkworms to make a single kimono. Food In Korea, silkworm pupae are boiled and seasoned, then eaten as a popular snack food known as beondegi. In China, street vendors sell roasted silkworm pupae. The pupae are a delicacy in the Northern Area of China. They are baked with Satay sauces and rice to add extra flavour. In Japan, silkworm pupae are usually used as bait to catch fish, and sometimes served as tsukudani. It can be made by dipping and boiling Silkworm Pupae in a sweet-sour sauce with soy sauce and sugar. Images Wild silkworm Bombyx mandarina Cocoon of B.

Chapter 2 : How to Eat Silkworms | eHow

Now in its 23rd year, the Bug Fair is one of the most popular events at the Natural History Museum of Los Angeles www.nxgvision.com event, running Saturday and Sunday, is expected to draw 20, people with its interactive booths and live demonstrations.

The group sits on a couple of park benches, talking and laughing and soaking up the sun. On the tables are Coca-Cola, beer, pretzels and chips. The main dish is mealworms. Not hot dogs, or hamburgers, or barbecued chicken, or bologna sandwiches. But deep fried mealworms. With a little garlic salt and hot sauce thrown in. The picnickers happily munch away on the mealworms, scooping them up as if they were french fries. One guy tosses his head back and deposits a whole handful into his mouth. And for the culinary coup de grace, one man brings a big pot of home-made spaghetti with giant mealworms mixed into the pile of pasta. He broiled the bugs rather than fried them. Gotta eat healthy, he says. They have gathered here to talk about - and demonstrate - their interest in ingesting insects. For Stegner, this picnic represents her baptism in bugs as food. The year-old Oakland resident says she always enjoys tasting new foods, so she decided to give this a try. After trying the worms and crickets, Stegner says she likes the bugs just fine. Her 9-year-old son Eric, however, is of a different mind. The youngster says he took a small bite of a fried cricket - and then promptly spit the rest of it out on the ground. He and his 8-year-old brother, Brian, sit on the grass, enthralled by a cluster of worms and crickets they have put in a plastic container. They take the bugs out and set them scurrying on the ground. But there are also people in our midst who choose to eat bugs. Who like to eat bugs. Who cook the crunchy creatures and include them in their daily diets. The practice of eating insects is called entomophagy. Those who do it say it is safe, but advise that people cook any insects they plan to eat. That kills off any parasites that might exist. His interest began a couple of years ago, after he snagged a bunch of crickets in a Fresno field one day, then went home and whipped up a little dish of cricket snack mix. Now the San Francisco resident is singing the praises of culinary creations like cricket curry over rice, little tarantula cakes and - his favorite - fried grasshoppers. The writer and chef, who lives near Seattle, says bug eating is an idea whose time has come. If none of those dishes does it for you, how about his Termite Treats, which resemble Rice Krispy Treats only with termites as the main ingredient? Asked about the tastes of various insects, Gordon says crickets taste like shrimp, scorpions taste like crabs and grasshoppers taste like green peppers. Participants had 20 of the Gordon-cooked creatures placed on their plates. Or cookies - Gordon bakes batches of White Chocolate and Waxworm Cookies that he says are to die for. Hot Lix is an year-old insect-candy company that has a store in Pismo Beach. Among its tasty treats: For many people, of course, the thought of insects being edible is nothing short of incredible. They find the idea gross, disgusting and crazy. But bug devourers say this kind of thinking is just plain silly. Ground-up bugs often get into cereal and bread during the manufacturing process, Bowers says. Bugs also are found in fruits, juices and vegetables. The eschewing of bug food seems a particular brand of American squeamishness, say insect eaters, who add that such an attitude seems odd for a people who have no problem consuming cows, chickens and other livestock. In Mexico, says Gordon, people eat grasshopper tacos, and in Colombia fried ants is viewed as a snack akin to popcorn. It takes a lot to undo some kinds of conditioning. Fisher has dined on grasshoppers, worms, ants and beetle larvae. Fellow picnicker Diaz Kwan has also been bitten by the bug. Drinking beer and eating fried mealworms for the first time, he says he likes this snack. Bowers says people should be careful of where they get insects. For example, gathering bugs from a public park might not be a good idea because there may be a lot of pesticide on them. Bowers also says people who are allergic to shellfish should probably stay away from eating insects. Pet food stores and bait shops are good places to purchase items like worms, crickets and ants, say bug consumers. When the group is ready to eat, he pours corn oil into his portable camping stove and heats it up. Once the oil is bubbling, he empties the batch of worms into the stove. Then Bowers takes a pair of tongs and stirs the bugs around. And then the picnickers partake. They ask passers-by in the park if they want to try any of the food, but no one takes them up on the offer. After a while, one man comes over and grabs a handful of the bugs from the grease-stained paper and stuffs them into his mouth. He smiles and says thanks.

It has only had a couple of informal gatherings since Bowers formed the club in February of But he says there is a lot of interest in the BABES Web site, where information is posted and exchanged about bug eating. A look at the site offers some interesting reading. A woman named Courtney unburdens herself of a family secret: As part of his project, he bought some crickets and made Chocolate Chip Chirpie Cookies. One man writes from Madras, India. He shares his eating experiences, telling of the delicious Mopane worm he ate in South Africa and of the special way to prepare termite dishes in India. The bug banquet at Dolores Park is starting to wind down. Eric grabs a bowl of the spaghetti - leaving out the worms.

Chapter 3 : Food of Assam | The Ultimate Food Guide to Assam

In Japan, silkworm pupae are usually used as bait to catch fish, and sometimes served as tsukudani. It can be made by dipping and boiling Silkworm Pupae in a sweet-sour sauce with soy sauce and sugar.

Trang December 11, at 6: I recommend using grated cassava. Hope you give the recipe a try! Thank you very much for this awesome recipe Trang December 2, at 6: Thanks for taking the time to share your results. I made the recipe before with 2 Tbsp tapioca for one oz bag that it came out a bit too dense. I also like the 1 cup of coconut milk per oz bag ratio vs. I made it for a party and everyone was saying that it was so good, and so much better than buying in the market qualities vary there too. Also, I used the frozen grated coconut in the Asian grocery store for the coating instead of the desiccated coconut and it was vastly superior. Steaming the coconut a few minutes also helped bring out the flavor. Trang April 19, at This is one of those recipes, I tinkered with for awhile before getting the results I liked. Thanks for sharing the tip about using frozen grated coconut. I wonder if it will make a difference Trang November 27, at 9: With fresh cassava, I recommend that you soak the shredded cassava in water for an hour or so to help remove the toxin. Several changes of water is good too. Once you cook the cassava, the texture is the same. Hope that helps and good luck! Reply Quyen November 15, at May I ask where can I get the frozen coconut? Thanks so much for the detailed instructions. Trang November 16, at 9: However, the shredded coconut that I am using is dried and you can buy this at any American grocery store. Good Luck with the recipe!

Chapter 4 : Silkworm Cassava Cake (Banh Tam Khoai Mi) | RunAwayRice

In the mood for a meal of sweet and sour silkworm or cream of katydid soup? Have a hankering for Oaxacan Whoppers, a spicy south-of-the-border dish featuring Eastern lubber grasshoppers? If taking a bite out of a bug is your bag or you're simply a culinary daredevil, then David George Gordon is your.

The fact that even though the ingredients are the same but the end product turns out to be different every time, is a sign of the diversity that the world has to offer. With a wide variety of indigenous food to offer, the food of Assam is famous for its distinct flavoring and influences. Did I mention that it is a heaven for non-vegetarian lovers? Delicious pork, chicken and mutton dishes will leave you craving for more. The herbs and delicate flavors, along with the influence from Bengali cuisine, make the food of Assam a joyous affair for all food lovers! It is a delicious curry made from raw papaya, pulses, taro and also with a main non-vegetarian ingredient. All of these is then filtered through dried banana leaves which gives it a unique and an unexpectedly refreshing flavour. It is generally eaten with rice during lunch. Duck meat curry source Duck meat, if cooked properly, tastes heavenly. This delicacy of the food of Assam is cooked with Ash Gourd lauki and is generally cooked on special occasions. The use of whole spices gives it a unique flavour. The curry can be cooked according to individual preferences which varies from person to person. It can be cooked in lentil, sesame, pumpkin and a lot more! Maasor Tenga tangy fish curry Maasor tenga source This graceful dish of Assamese cuisine is extremely refreshing on the palette. The fish curry is made with everything sour and yet it magically turns out to be delicious! The fish is slow cooked in a rich, tangy broth made with tomato, outenga elephant ear, and lemon. The end result is a melt-in-the-mouth fish, flavoured in pure awesomeness. Ask any Assamese person about this dish and watch them drown in home-sickness just at the mention of it. It is essentially mashed potatoes with mustard oil, onion, coriander and salt. This dish can be eaten at both lunch and dinner. Assam version of the humble mashed potato is delightfully simple and flavoursome. Made with herbs and vegetables, the components of this dish are generally seasoned with ginger, garlic, cinnamon, onions and sometime lemon. It is a staple form of food of Assam which is consumed on a regular basis, and is still tasty and flavorsome! Ou Khatta – Food of Assam to tingle your taste buds! The dish then ready as a great compliment to your meal. Paro Manxho pigeon meat – A traditional delicacy of Assam Pigeon meat curry source As cruel as it might sound, pigeon meat is a delicacy in Assam. It is simply a delight for non-vegetarian. Pigeon meat usually makes your body warm and is perfect to eat in winters. This is a wonderful Assamese dish which combines the deliciously texture of the banana flower with Pigeon meat. Banana flowers are the buds of the banana plant, which are soaked and shredded for use in curries.

Chapter 5 : BEST Sweet and Sour Sauce - The Daring Gourmet

Sweet and Sour Silkworms Silkworms are a necessary component to the production of silk [hence their name], so it doesn't make too much sense to eat them right? Initially people chose to eat the baby silk worms that wouldn't survive their harsh environment, but as people realized how tasty silkworms were, their recipe began to involve.

Wild silkworm *Bombyx mandarina* Eggs take about 14 days to hatch into larvae, which eat continuously. They have a preference for white mulberry, having an attraction to the mulberry odorant cis-jasmone. They are not monophagous since they can eat other species of *Morus*, as well as some other *Moraceae*, mostly Osage orange. They are covered with tiny black hairs. When the color of their heads turns darker, it indicates they are about to molt. After molting, the instar phase of the silkworms emerge white, naked, and with little horns on their backs. After they have molted four times, their bodies become slightly yellow and the skin becomes tighter. The larvae then prepare to enter the pupal phase of their lifecycle, and enclose themselves in a cocoon made up of raw silk produced by the salivary glands. The final molt from larva to pupa takes place within the cocoon, which provides a vital layer of protection during the vulnerable, almost motionless pupal state. Many other *Lepidoptera* produce cocoons, but only a few—the *Bombycidae*, in particular the genus *Bombyx*, and the *Saturniidae*, in particular the genus *Antheraea*—have been exploited for fabric production. If the animal is allowed to survive after spinning its cocoon and through the pupal phase of its lifecycle, it releases proteolytic enzymes to make a hole in the cocoon so it can emerge as an adult moth. These enzymes are destructive to the silk and can cause the silk fibers to break down from over a mile in length to segments of random length, which seriously reduces the value of the silk threads, but not silk cocoons used as "stuffing" available in China and elsewhere for doonas, jackets etc. To prevent this, silkworm cocoons are boiled. The heat kills the silkworms and the water makes the cocoons easier to unravel. Often, the silkworm itself is eaten. As the process of harvesting the silk from the cocoon kills the larva, sericulture has been criticized by animal welfare and rights activists. Mahatma Gandhi was critical of silk production based on the Ahimsa philosophy "not to hurt any living thing". He also promoted Ahimsa silk, wild silk made from the cocoons of wild and semiwild silkworms. Some may emerge with the ability to lift off and stay airborne, but sustained flight cannot be achieved. This is because their bodies are too big and heavy for their small wings. However, some silkworms can still fly. Females are about two to three times bulkier than males for they are carrying many eggs, but are similarly colored. Adult *Bombycidae* have reduced mouth parts and do not feed, though a human caretaker can feed them. Cocoon[edit] Cocoon of *B.* About 2, to 3, cocoons are required to make a pound of silk 0. At least 70 million pounds of raw silk are produced each year, requiring nearly 10 billion cocoons. Due to its small size and ease of culture, the silkworm has become a model organism in the study of lepidopteran and arthropod biology. Fundamental findings on pheromones, hormones, brain structures, and physiology have been made with the silkworm. Many hundreds of strains are maintained, and over Mendelian mutations have been described. *Bombyx mori* females are also one of the few organisms with homologous chromosomes held together only by the synaptonemal complex and not crossovers during meiosis. In September, the effort was announced as successful. They are implanted during reconstructive surgery to support or restructure damaged ligaments, tendons, and other tissue. They also created implants made of silk and drug compounds which can be implanted under the skin for steady and gradual time release of medications. They found that on particularly straight webs of lines, the worms would connect neighboring lines with silk, weaving directly onto the given shape. Using this knowledge they built a silk pavilion with 6, silkworms over a number of days. Silkworms have been used in antibiotics discovery as they have several advantageous traits compared to other invertebrate models. RH [17] and GPI [18] are among the notable antibiotics discovered using silkworms. Domestication[edit] The domesticated form, compared to the wild form, has increased cocoon size, body size, growth rate, and efficiency of its digestion. It has gained tolerance to human presence and handling, and also to living in crowded conditions. The domesticated moth cannot fly, so it needs human assistance in finding a mate, and it lacks fear of potential predators. These changes have made the domesticated strains entirely dependent upon humans for survival. The silkworm is one of the few

organisms wherein the principles of genetics and breeding were applied to harvest maximum output[citation needed]. It is second only to maize in exploiting the principles of heterosis and cross breeding. The major objectives are improving fecundity the egg-laying capacity of a breed , the health of larvae, quantity of cocoon and silk production, and disease resistance. Healthy larvae lead to a healthy cocoon crop. Health is dependent on factors such as better pupation rate, fewer dead larvae in the mountage, [22] shorter larval duration shorter larval duration lessens the chance of infection and bluish-tinged fifth-instar larvae which are healthier than the reddish-brown ones. Quantity of cocoon and silk produced are directly related to the pupation rate and larval weight. Healthier larvae have greater pupation rates and cocoon weights. Quality of cocoon and silk depends on a number of factors including genetics. Hobby raising and school projects[edit] In the US, teachers may sometimes introduce the insect life cycle to their students by raising silkworms in the classroom as a science project. Students have a chance to observe complete life cycles of insect from egg stage to larvae, pupa, moth. The silkworm has been raised as a hobby in countries such as China, South Africa, Zimbabwe, and Iran. Children often pass on the eggs, creating a non-commercial population. The experience provides children with the opportunity to witness the life cycle of silkworms. The practice of raising silkworms by children as pets has, in non-silk farming South Africa, led to the development of extremely hardy landraces of silkworms, because they are invariably subjected to hardships not encountered by commercially farmed members of the species. Genome[edit] The full genome of the silkworm was published in by the International Silkworm Genome Consortium. High genetic variability has been found in domestic lines of silkworms, though this is less than that among wild silkmths about 83 percent of wild genetic variation. This suggests a single event of domestication, and that it happened over a short period of time, with a large number of wild worms having been collected for domestication. Research also has yet to identify the area in China where domestication arose. In Assam , they are boiled for extracting silk and the boiled pupae are eaten directly with salt or fried with chilli pepper or herbs as a snack or dish. In China, street vendors sell roasted silkworm pupae. Silkworms have also been proposed for cultivation by astronauts as space food on long-term missions. She was drinking tea under a tree when a silk cocoon fell into her tea. As she picked it out and started to wrap the silk thread around her finger, she slowly felt a warm sensation. When the silk ran out, she saw a small larva. In an instant, she realized this caterpillar larva was the source of the silk. She taught this to the people and it became widespread. Many more legends about the silkworm are told. The Chinese guarded their knowledge of silk, but, according to one story, a Chinese princess given in marriage to a Khotan prince brought to the oasis the secret of silk manufacture, "hiding silkworms in her hair as part of her dowry", probably in the first half of the first century AD. Silkworm diseases[edit] *Beauveria bassiana* , a fungus, destroys the entire silkworm body. This fungus usually appears when silkworms are raised under cold conditions with high humidity. This disease is not passed on to the eggs from moths, as the infected silkworms cannot survive to the moth stage. This fungus can spread to other insects. Grasserie , also known as nuclear polyhedrosis, milky disease, or hanging disease, is caused by infection with the *Bombyx mori* nuclear polyhedrosis virus. If grasserie is observed in the chawkie stage, then the chawkie larvae must have been infected while hatching or during chawkie rearing. Infected eggs can be disinfected by cleaning their surfaces prior to hatching. Infections can occur as a result of improper hygiene in the chawkie rearing house. This disease develops faster in early instar rearing. Pebrine is a disease caused by a parasitic microsporidian, *Nosema bombycis* Nageli. Diseased larvae show slow growth, undersized, pale and flaccid bodies, and poor appetite. Tiny black spots appear on larval integument. Additionally, dead larvae remain rubbery and do not undergo putrefaction after death. This disease can be carried over from worms to moths, then eggs and worms again. This microsporidium comes from the food the silkworms eat. If silkworms get this disease in their worm stage, no visible symptoms occur. Traditional Chinese medicine[edit] In traditional Chinese medicine , silkworm is the source of the "stiff silkworm", which is made from dried fourth- or fifth-instar larvae which have died of "white muscardine disease", the *Beauveria bassiana* fungal infection mentioned above. It is believed to dispel flatulence , dissolve phlegm , and relieve spasms.

Chapter 6 : B.A.B.E.S. Bay Area Bug Eating Society - Article from Oakland Tribune

I have a cookbook I picked up in Canadia [sic] that has Sweet and Sour Silkworm Pupae in it. Now I'm a little nervous to try Now I'm a little nervous to try Mr. Mordax, Dec 23,

She lays eggs on the leaves of mulberry trees. The eggs are covered with gelatinous secretion by which they stick to the leaves. Female moth silkworm lays eggs and die after laying eggs as she does not eat anything. The eggs are kept in a cool place so that they can be stored for a long time. In a favourable condition, they hatch into larva. Larva are produced in about 2 weeks from eggs at a temperature of 18 to 25 degree Celsius. Silk Edit The cocoon is made of one thread of raw silk from to meters to feet long. The fibers are very thin. About 2, to 5, cocoons are needed to make a pound of silk. If the animal is allowed to survive after spinning its cocoon, it will make a hole in the cocoon when it exits as a moth. This would cut the threads and ruin the silk. Instead, silkworm cocoons are thrown into boiling water, which kills the silkworms and also makes the cocoons easier to unravel. Often, the silkworm itself is eaten. The adult silkworms moths cannot fly. The silkworm-moths have wings about 2 inches wide and a white hairy body. Females and males are similarly colored. Adult silkworms have small mouths and do not eat. According to the book written in the 13th century, she was drinking tea under a tree when a cocoon fell into her tea. She picked it out and as it started to wrap around her finger, she slowly felt something warm. When the milk ran out, she saw a small cocoon. In an instant, she realized that this cocoon was the source of the silk. She taught this to the people and it became common. Khotan is an oasis, located on the southern edge of Taklamakan Desert , and was one of the first places outside of inland China to begin cultivating silk. In the far past, the Chinese guarded their knowledge of silk. It is said that a Chinese princess smuggled eggs to Khotan, hidden in her hair. After this, the way to cultivate silk was transmitted to the Western Asia, and also Europe. Food Edit In Korea , silkworm pupae are boiled and seasoned, then eaten as a popular snack food known as beondegi. In China, street vendors sell roasted silkworm pupae. The pupae are a delicacy in the Northern Area of China. They are baked with Satay sauces and rice to add extra flavor. In Japan, silkworm pupae are usually used as bait to catch fish, and sometimes served as tsukudani.

Chapter 7 : Food Sweet Stock Photos - Royalty Free Stock Images

Sweet and sour pork, food of the north I live in Harbin, where northeastern style food (known as Dong Bei) rules supreme. Even before I moved here I would hear people talking about the hearty, delicious dishes to be found in this part of China.

Have a hankering for Oaxacan Whoppers, a spicy south-of-the-border dish featuring Eastern lubber grasshoppers? The Port Townsend, Wash. Then the real adventure begins. Gordon, with the help of volunteers from the audience, will prepare one of his arthropod recipes. After that, intrepid attendees and supporters of entomophagy the fancy term for bug eating are welcome to sample the exotic cuisine. Indeed, teens and kids constitute his most enthusiastic and open-minded audience. Well, he decided to do it with crickets. Then I was in Denver recently doing a cooking demonstration and I bumped into another teenager who was doing exactly the same thing for his class. He produced guides to orca whales and bald eagles. Another book covered Washington nature preserves and nature conservancy. However, his readership really grew after he began to tackle more esoteric aspects of the wild kingdom. The book is now in its fifth printing. While researching his cockroach book, he discovered a few recipes for cooking these creatures. He also found that arthropod eating is connected to numerous past and present cultures. The anti-bug-eating bias in the United States and Europe is partly rooted in the perception of insects as pests and crop destroyers, Gordon says. He believes that, if presented in a blindfold test, some bugs might prove quite tasty to American palates. They are actually caterpillars of moths that live off the wax of the honeycomb of a beehive. It goes back to the you-are-what-you-eat adage. They are very sweet and they have an almost almond-like taste. Scorpions almost taste like a crab. He points out that these larger animals generate much more waste and require far more resources to raise. Both are vegetarians, as was Gordon before he started cooking with the likes of crickets and caterpillars. But it did require some courage. County, Exposition Blvd.

Chapter 8 : Bombyx mori - Wikipedia

Or perhaps you're in the mood for Asian -- say, "Sweet and Sour Silkworm," or "Superworm Tempura?" 'Not bad' Gordon says he enjoys getting people to try his recipes.

Chapter 9 : The Eat-a-Bug Cookbook, Revised by David George Gordon | www.nxgvision.com

With it being so close to Halloween I wanted to share a childhood sweet treat. Growing up, every kid I knew loved Silkworm Cassava Cake. Perhaps it's the bright colors, the chewy, slightly stretchy consistency which prompted us to play with the cakes before eating them or even the mild sugar rush.