

Fluvanna County Public Library

Spice of the Month Club

Achiote (Annatto) Powder

Flavor Profile: Earthy, Peppery, hint of bitterness

Achiote and annatto are used interchangeably. Annatto is the seed or extract of the achiote tree (*Bixa Orellana*, also known as the lipstick tree, is an evergreen tropical shrub), which is indigenous to Central and South America, Mexico, and the Caribbean. The seeds and pulp have been used for hundreds of years for a variety of purposes and are used heavily in Latin America as a dye, medicine, and an ingredient in many foods. It has a naturally intense hue that can range in color from yellow to dark orange when used as a dye. Although the seeds are a deep, bright orange-red.



The fruit of the achiote tree is shaped like a heart and covered with thick, spiky hairs. As the fruit matures, the pod can be opened easily by hand to reveal its red seeds. The seeds can be ground into a powder, turned into a paste, or infused into oil. Commercially, the seeds and flesh are processed to extract the potent edible dye.

This spice goes by many names in different parts of the world:

- *Achiote* is used in Mexico and in the Aztec language of Nahuatl, as well as Spanish-speaking countries of the Caribbean.
- *Annato* is common on some Caribbean islands and in areas of South America.
- *Roucou* is used frequently in Trinidad and Tobago, Martinique, and Guadalupe.
- *Achuete* is primarily used in the Philippines.
- *Urucul* is the name of the spice among the Tupi-Gurani Indians of the Amazon.

It is believed that annatto made the transition from use as a dye to use in the kitchen when Europeans who arrived in the Americas couldn't find saffron to tint their food and instead used annatto.

Annatto is responsible for the yellow color of butter, margarine, and cheese, all of which would be a pale creamy color without the addition of this natural dye. Cheddar cheese acquired its classic orange color from annatto during the 1800s when it was thought that high-quality cheeses gained their color from the presence of beta-carotene from higher quality green grass fed to cattle. Ironically, many people now assume the bright yellow color comes from unnatural ingredients.

Annatto is used as a colorant in many other commercial products such as processed meats, smoked fish, beverages, and a variety of packaged food. Many cosmetics utilize annatto for its strong hue, giving it the nickname "the lipstick tree."

Many dishes in Central and South America, such as arroz con pollo, use annatto for the distinct yellow color. Annatto is also used to color soups, stews, and spice rubs. It's an ingredient in Goya's Sazón seasoning (it will say *con culantro y achiote*), giving rice its color in Caribbean-style black beans and yellow rice, and is added to many tandoori cooking recipes, too.

Annatto seeds are usually steeped in oil or ground to a powder prior to adding to recipes, rather than adding the seeds whole. Annatto is a key flavor component in many Latin American dishes. The paste is easy to use; just

take a small bit of it and mix it with water. The powder can be sprinkled right onto whatever you are cooking as you would with any other dried ground spice or herb. If you have access to dried seeds, those can be soaked in hot water until they give off their color, or you can fry them in a neutral oil such as canola and strain it off prior to use in dishes.

When used in small amounts, primarily as a food colorant, achiote has no discernable flavor. When used in larger amounts to add flavor, it imparts an earthy, peppery flavor with a hint of bitterness. Achiote seeds give off a slightly floral or peppermint scent.

Most culinary uses of this ingredient start at the beginning of the process of cooking, implementing achiote for its color and flavor, and using it as a paste, a rub, a marinade, or an oil.

Potential health benefits of Annatto

- Antioxidant – Annatto contains numerous compounds with antioxidant properties, including Carotenoids, terpenoids, flavonoids, and tocotrienols. Antioxidants are compounds that can neutralize potentially harmful molecules known as free radicals, which can damage your cells if their levels rise too high. Research has found that damage caused by high free radicals levels is linked to chronic conditions, such as cancers, brain disorders, heart disease, and diabetes.
- Antimicrobial Properties – In test-tube studies, annatto extracts were shown to inhibit the growth of various bacteria, including *Staphylococcus aureus* and *Escherichia coli*. In another test-tube study, annatto killed various fungi. Moreover, adding the dye to bread inhibited the growth of fungi, extending the bread's shelf life. This research indicates that this food coloring may have a promising role in food preservation.
- Anti-Cancer Properties – Early research suggests annatto has cancer-fighting potential. Test-Tube studies have found that extracts of this food coloring may suppress cancer cell growth and induce cell death in human prostate, pancreas, liver, and skin cancer cells. The potential anticancer properties of annatto have been linked to compounds it contains.
- May Promote Eye Health – Annatto is high in carotenoids, which may benefit eye health. In particular, it's high in the carotenoids bixin and norbixin, which are found in the outer layer of the seed and help give it its vibrant yellow-to-orange color.
- Other Potential Benefits – Annatto may also aid heart health and may reduce inflammation.

Sazon Seasoning

Traditional sazón seasoning is an all purpose seasoning popular in Caribbean and Latin cooking, particularly Puerto Rico, though widely used in other regions. You'll find it in Spanish and Mexican cuisine as well.

- 1 Tablespoon ground annatto seeds
- 1 Tablespoon garlic powder
- 1 Tablespoon ground coriander
- 1 Tablespoon ground cumin
- 2 tsp. dried oregano
- 1 tsp. onion powder
- 1/2-1 tsp. cayenne pepper, optional for a spicier version
- ½ tsp. salt or to taste
- ½ tsp. black pepper or to taste



1. Mix all of the ingredients together in a bowl until well combined.
2. Use as desired. Store in a sealed container in a cool, dark place. Makes about 1/3 cup.
3. NOTE: Suggested Uses: a flavor enhancer for soups and stews, mixed into meat fillings, added to rice dishes, as a dry rub or wet marinade for meat and fish, with steamed or roasted vegetables (starchy vegetables the best).

<https://www.chilipeppermadness.com/recipes/sazon-seasoning/>

Achiote Paste (Mexican & Caribbean)

- 2 limes, juice of
- 4 garlic cloves, finely chopped
- 2 Tablespoons ground achiote (or annatto) powder
- 1 tsp. dried oregano
- ½ tsp. ground cumin
- ½ Tablespoon brown sugar
- 1 Tablespoon chipotle adobo sauce (optional)
- 2 Tablespoons red wine vinegar
- 1 Tablespoon olive oil



1. Whisk lime juice, garlic, achiote, oregano, cumin, brown sugar, adobo sauce, wine vinegar and oil until well blended.
2. Add marinade to a Ziploc bag with chicken, pork or beef; seal bag and turn to coat. Marinade for at least 3 hours or overnight for more flavor.
3. Season meat with salt and pepper before cooking.

<https://www.food.com/recipe/achiote-marinade-491451>

Shredded Pork in Achiote Sandwich (Easy Cochinita Pibil)

For the Cochinita Pibil:

- 4 lbs. pork shoulder cut into 2-inch cubes
- 1 ½ cups orange juice
- 2 Tablespoons lime juice
- 2 Tablespoons white vinegar
- 2 oz. Achiote paste
- 10 peppercorn kernels or 1/8 tsp. ground black pepper
- 2 garlic cloves
- ¼ of a medium white onion
- ½ tsp. marjoram or Mexican oregano
- 2 bay leaves
- ½ Tablespoons salt

For the Sandwiches

- 12 Telera rolls or Kaiser rolls
- ½ cup refried black beans



- 6 Tablespoons mayonnaise
- 2 cups shredded lettuce
- 3 plum tomatoes sliced
- ½ of a medium white onion, thinly sliced
- Pickled Jalapenos or Habaneros, optional

1. Season the pork with salt and place it inside the pressure cooker.
2. To make the Achiote sauce, place the orange juice, lime juice, vinegar, Achiote paste, peppercorn kernels, garlic cloves, onion, and oregano (or marjoram) in your blender jar. Process until you have a smooth sauce.
3. Pour this Achiote mixture over the pork, add the 2 bay leaves, then close & lock the lid of your pressure cooker. Cook the meat using the manual option for 45 minutes in the pressure cooker setting.
4. After the 45 minutes, and once the release valve allow it, remove the lid. Shred the meat, then check to see if it needs more salt. After this, cook for 10 additional minutes in the manual setting with the lid off. This will allow the shredded meat to continue absorbing the Achiote flavor, and also let the sauce thicken a little.
5. To make the sandwiches, start by cutting open the rolls you're going to use. Spread mayonnaise on one half, and refried black beans on the other. Next, spoon on some of the shredded pork, then top it with some shredded lettuce, one or two tomato slices, and a couple of white onion slices. This pork in Achiote sandwich is usually served with pickled jalapeno peppers or pickled habanero peppers, depending on the region.

<https://www.mexicoinmykitchen.com/shredded-pork-in-achiote-sandwich>

Mexican Achiote Roast Chicken (Serves 6)

- 6 chicken leg quarters (bone in and skin one), approx.. 4 lbs.
- 8 Tablespoons of Achiote paste
- 2 Tablespoons butter, room temperature
- 1 ½ Tablespoon kosher salt
- 1 large onion
- Optional for serving: cilantro, corn tortillas, and limes



1. Preheat the oven to 425F.
2. In a small bowl mix together the salt, achiote paste (8 tbsp.) and softened butter, until well incorporated. Set aside. Slice the onion in ½ inch slices and set aside.
3. Place the chicken in a large bowl and rub the paste butter mixture all over the chicken. You may want to use gloves for this process because the paste will stain your hands.
4. Transfer the chicken and onion slices to a foil lined baking sheet. Bake for 20 minutes and then baste the chicken and onions with the juices. Bake for an additional 20 minutes or until cooked through. Serve the chicken and onions with tortillas, limes and cilantro.

<https://cooksandkid.com/mexican-achiote-roast-chicken/>

Ecuadorian Chicken and Rice - (Latin American spin on fried rice)

- 1 roasted chicken, pulled
- 2-3 Tablespoons oil
- 1 cup diced white onions
- 6 garlic cloves, crushed
- 3 Tablespoons chopped cilantro
- ½ Tablespoon hot Mexican chili pepper powder
- 1 tsp. ground cumin
- 2 Tablespoons achiote powder
- 2 bell peppers (1 red and 1 green), diced
- 10-12 baby carrots, diced
- 7 Tablespoons soy sauce
- 2 Tablespoons Worcester sauce
- 3 Tablespoons parsley stir-in paste
- 3 Tablespoons fresh cilantro, chopped
- 3 Scallions/green onions, finely chopped

Tomato Sauce

- 3 Plum tomatoes
- 3 Jalapenos
- 2 Tablespoons fresh cilantro, diced

Rice

- 2 cups white rice
- 2 cups chicken stock
- 2 cups water



Rice

1. Bring the broth to a boil. Add the rice, reduce heat to low, cover and simmer for about 20 minutes.

Chicken

1. Meanwhile de-bone the chicken and reserve the chicken meat for later.

Vegetables and Spices

1. Heat 2-3 tablespoons oil and the achiote and Mexican chili powder over medium heat in a Dutch oven. Cook for 2 minutes.
2. Add the chopped onions and cook for 2 minutes.
3. Next add the crushed garlic, half the Worcester sauce, half the soy sauce, cumin, cilantro and cook for about 5-8 minutes or until the onions are soft.
4. Add the cooked chicken meat to the vegetables.
5. Next, add the cooked rice. Cook for 5 minutes, stirring occasionally.
6. Stir in the remaining soy sauce, remaining Worcester sauce and mix well.
7. Tomato Sauce
8. Add the tomatoes and jalapenos to a food processor and blend well.
9. Pour the sauce into a stock pot with the cilantro and cook for about 5 minutes on medium heat.
10. To serve, spoon as much of the chicken and rice as you wish on your plate.
11. Top with the green onions and tomato sauce.

<http://www.feedyoursoul2.com/ecuadorian-chicken-and-rice/>

Locro de Papa (Ecuadorian Potato and Cheese Soup)

- 10 medium sized potatoes peeled and chopped into small and large pieces
- 2 Tablespoons oil
- 1 white onion diced
- 2 garlic cloves minced



- 2 tsp. cumin
 - 1 tsp. achiote powder
 - 7 cups of water
 - 1 cup of milk or more
 - 1 cup grated or crumbled cheese quesillo, queso fresco, mozzarella or Monterey jack
 - 1 bunch of cilantro leaves only, minced
 - Salt to taste
1. Prepare a refrito or base for the soup by heating the oil over medium heat in a large soup pot; add the diced onions, minced garlic cloves, cumin, and achiote powder. Cook, stirring frequently, until the onions are tender, about 5 minutes.
 2. Add the potatoes to the pot and mix until they are coated with the refrito. Continue cooking for about 5 minutes, stirring every couple of minutes.
 3. Add the water and bring to boil, cook until the potatoes are very tender. Use a potato masher to mash the potatoes in the pot, don't mash all of them, the consistency of the soup should be creamy with small tender chunks of potatoes.
 4. Turn the heat down to low, stir in the milk and let cook for about 5 minutes. You can add more milk if the soup is too thick.
 5. Add salt to taste.
 6. Add the grated cheese and cilantro, mix well, and remove from the heat.
 7. Serve warm with avocados, scallions, queso or feta cheese (or mozzarella) and hot sauce.

<https://www.laylita.com/recipes/locro-de-papa-creamy-potato-soup-with-cheese/>

Carne Con Papas (Cuban) Serves 6

An old-fashioned Cuban dish of tender, succulent meat and potatoes bursting with flavor.

- ½ green bell pepper, seeded and chopped
- ½ small white onion, chopped
- 3 cloves garlic, crushed
- 1 ¼ tsp. ground cumin, divided
- ¼ tsp. salt
- 1/8 cup olive oil
- 2 Tablespoons achiote powder
- 2 (8 oz.) cans tomato sauce
- 2 pounds beef stew meat, but into 1 inch cubes
- 2 white potatoes
- 4 cups water, or as needed
- 1 cup white wine (use apple cider vinegar or broth if preferred)
- 6 cubes beef bouillon



1. Combine bell pepper, onion, garlic, ¼ tsp. cumin, and salt in a blender. Pulse while pouring 1/8 cup olive oil through the top of the blender. Blend until smooth; set aside.
2. Heat 1 tablespoon olive oil in a Dutch oven on medium heat. Sauté pepper and onion mixture for 1 minute, then stir in tomato sauce.

3. Return to a simmer, then add beef; let simmer for 5 minutes. Stir in potatoes. Pour in water and wine. Drop in bouillon cubes. Bring to a boil and cook for 1 minute. Add water, if necessary, to cover.
4. Cover the Dutch oven and finish in a 325F oven for 2-2.5 hours.
5. NOTE: You can brown the meat before you use it for more flavor.

https://www.allrecipes.com/recipe/31840/carne-con-papas/?utm_campaign=yummly&utm_medium=yummly&utm_source=yummly

Cuban-Style Yellow Rice

- 4 cups long grain rice
- 8 cups water
- 1 small onion, minced
- 2 tsp. salt
- 1/8 tsp. achiote powder
- 1/8 tsp. paprika
- Black pepper to taste
- 1 cup frozen peas, thawed
- 1 (4 oz.) jar sliced pimento peppers, for garnish



1. Place the rice in a sieve and rinse under cold water until the water runs clear. Shake sieve to remove excess water from rice.
2. Place rice in a large saucepan with a tightly fitting lid and add water. Stir in the onion, salt, achiote powder, paprika and pepper. Bring the mixture to boil over medium-high heat. Reduce the heat to low, cover pan, and simmer. After cooking for 10 minutes, gently stir the peas into the rice. Cook until all the water is evaporated and the rice is tender, 15-10 minutes longer. Serve garnished with pimento slices.

<https://www.allrecipes.com/recipe/142008/cuban-style-yellow-rice/>

Red Beans

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| <ul style="list-style-type: none"> • 1 small onion, chopped • 1 small green bell pepper, chopped • 2 cloves garlic, chopped • 1 Tablespoon fresh cilantro leaves • 1 tsp. annatto or achiote powder • 1 Tablespoon olive oil • ½ cup diced ham • 1 (16.5 oz.) can red beans, drained | <ul style="list-style-type: none"> • 1 cup peeled and diced potatoes • ½ cup peeled and diced pumpkin • 1 cup water • 1 tsp. salt |
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1. In a blender or food processor, puree onion, bell pepper, garlic, cilantro, and annatto/achiote powder. Set mixture aside.
2. Heat a large, heavy saucepan over medium heat. Pour in olive oil and saute ham with pureed mixture for 10 minutes, until browned. Mix in beans, potatoes, pumpkin, water, and salt. Reduce heat to low and simmer, stirring occasionally, for approximately 25 minutes, until mixture thickens and potatoes and pumpkin are tender.

<https://www.allrecipes.com/recipe/18914/red-beans>

Sazon Chicken

- 4 bone-in chicken thighs
- 2 red onions
- 1 green pepper, you'll use about $\frac{3}{4}$ of it
- $\frac{1}{2}$ cup sour orange marinade (or fresh sour orange juice)
- 4 garlic cloves, grated
- 2 tsp. homemade sazón (see recipe above)
- $\frac{1}{4}$ cup olive oil
- $\frac{1}{4}$ cup lime juice
- $\frac{1}{2}$ of one lime zested
- $\frac{1}{2}$ tsp. oregano
- $\frac{1}{2}$ tsp. cumin
- $\frac{1}{4}$ tsp. black pepper
- $\frac{1}{2}$ tsp. garlic powder
- $\frac{1}{8}$ tsp. chicken bouillon powder
- 1 cup water



1. To make the marinade, in a bowl combine the olive oil, grated garlic cloves, lime juice and lime zest, oregano, cumin, and salt & pepper. Stir well to combine.
2. Remove the skin from the bone-in chicken thighs and place chicken in a large bowl. Season with 3 tsp. of the homemade sazón and $\frac{1}{2}$ tsp. of garlic powder, making sure to season both sides of the chicken. Pour in the homemade marinade and the sour orange marinade.
3. In a medium pan heat 1 cup of water to boiling. Add in the seasoned chicken thighs and pour in all the marinade from the bowl as well, sprinkle the tops of the chicken with the $\frac{1}{8}$ tsp. of chicken bouillon. Reduce heat to low and cover. Simmer covered for 30 minutes.
4. While the chicken simmers, slice the red onions into thin slices, chop about $\frac{3}{4}$ of the green pepper into pieces about an inch big, and cut the lime into wedges.
5. After the chicken has simmered for 30 minutes, flip each thigh so it is now face-down and increase heat to medium. Cover and continue to cook for 15 minutes.
6. After 15 minutes, remove the cover and increase heat to high to create a boil and flip chicken so it is now face up again. Add the red onions and the peppers. At this point, you are cooking off all the liquid in the pan. Cook for 10 minutes then remove the chicken, chicken should have an internal temp. of 165F. Cook the peppers and onions for another 10 minutes at medium high heat to caramelize them. You may need to carefully spoon out any excess oil. As the peppers and onions stick to the pan, occasionally add 1-2 tablespoons of water to deglaze the pan and allow the onions to caramelize even more. If anything is burning, reduce heat to medium.
7. Serve the chicken topped with the peppers and onions and extra lime wedges.

<https://aseasonedgreeting.com/2019/04/01/sazon-chicken/>

Library Resources

Essential Spices and Herbs by Christina Nichol – 641.6383 NIC

Gran Cocina Latina by Maricel Presilla – 641.5972 PRE

The Latin American Kitchen by Elisabeth Luard – 641.598 LUA

Spiced by America's Test Kitchen – 641.6383 AME

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