Arbor Organics LLC offers USDA-NOP certified “organic” (>95% organic) ingredients for use in cosmetics and personal care formulations. Arbor Organics LLC will be offering a full line of aqueous and anhydrous plant extracts. The aqueous extracts will be denoted with the “RS” designation, to indicate that these extracts are in a water and rice solution base, while the anhydrous will be identified by “SNO” to indicate that they are in a sunflower oil base.

NOP Organic Acerola RS/SNO: Acerola (Malpighia glabra) also known as Barbados cherry is a tropical plant said to have originated in the West Indies and Northern South America. The bright red fruit that grows on the shrub is often described as being equally sour and sweet and is an excellent source of vitamin C.

NOP Organic Algae RS/SNO: Spirulina platensis is a free-floating filamentous algae occurring naturally in tropical and subtropical waters with high pH and high concentrations of carbonate and bicarbonate. Spirulina is a very popular nutritional supplement due to its high amounts of protein (55-75% by dry weight), essential fatty acids (particularly gamma-linolenic acid or GLA), vitamins (mainly B vitamins), and minerals (potassium, calcium, iron, magnesium, selenium). Spirulina is also rich in a number of plant-based antioxidants.

NOP Organic Arnica RS/SNO: Arnica montana or wolf’s bane is a large flowering plant with its origins in Europe. Arnica has a long history of use in herbal medicine and the entire plant can be used including the flowers. An infusion of the leaves, for example, can help with bruising and sprains. Topical preparations have been shown to be effective anti-inflammatory agents.

NOP Organic Black Tea RS/SNO: Black tea accounts for over ninety percent of all tea sold in the West. Although its popularity is most likely due to its flavor, and not the nutritive benefits, tea is still an excellent source of polyphenols and other phytochemicals.

NOP Organic Blue Malva RS/SNO: Found naturally growing in prairies and pastures, up to 3 or 4 feet high, Blue Malva is a perennial that grows violet-blue five petal flowers. Used as a thickener in soups and stews for centuries, other traditional uses for the dried flowers include steeping them with water to soothe sore throats caused by coughs. Recognized as being rich in tannins and anthocyanins such as delphinidin and malvidin, the flower is useful for more than just decorative purposes.

NOP Organic Chamomile RS/SNO: Chamomile (Matricaria recutita) is an annual that is found in Europe, Asia, Australia and North America. Typically used in teas to treat an upset stomach or sleepless nights, chamomile is often thought of as a useful ingredient to calm oneself.

NOP Organic Comfrey RS/SNO: Comfrey (Symphytum officinale) has traditionally been used as a mild astringent, expectorant, emollient and anti-inflammatory. First cultivated around 400 BC, the plant has a reputation for being a healing herb. The plant is a perennial and has an
expansive root system, which is typically harvested for use in herbal remedies. The plant grows red, yellow, white and purple flowers during late spring and summer.

**NOP Organic Cranberry RS/SNO:** Cranberries are evergreen dwarf shrubs that grow in bogs in the cooler climates of the Northern Hemisphere. Recognized for their nutrient and antioxidant content, the cranberry has a reputation for being highly acidic when eaten raw.

**NOP Organic Eyebright RS/SNO:** Eyebright (*Euphrasia officinalis*) has been used historically to cure ailments of the eye and its use dates back to the ancient Greeks. The plant itself is small, growing to only 8 inches, and is covered in small white or purplish flowers. The precise chemical constituents have not been recorded but the plant does contain tannins, mannite and glucose.

**NOP Organic Ginger Root RS/SNO:** The Ginger rhizome, often referred to as the root has been used as a spice all over the world. Although is believed to have originated in China and India, the spice was brought to the West a minimum of two thousand years ago, references of ginger were found in Roman tax records written in the second century. The popularity of this ancient spice has not waned over the ages and today it is still incorporated into a variety of cuisines.

**NOP Organic Ginkgo Leaf RS/SNO:** Ginkgo is a unique tree, and is often described as a living fossil. There are no fossil records for other species in the *Ginkgoaceae* family since the Cenozoic era. The tree is a hardy plant and is capable of surviving urban areas. Some of the oldest known Ginkgo have been growing at temples in China for over 1,500 years. Typically regarded as being good for ones memory, ginkgo has quickly become a staple in healthy food arenas.

**NOP Organic Gotu Kola RS/SNO:** *Centella asiatica*, more commonly referred to as Gotu Kola is a medicinal herb that has been incorporated in both Ayurvedic and traditional Chinese medicines. Touted as increasing both energy and longevity, Gotu Kola is also believed to reduce inflammation, stimulate collagen production and aid in wound healing.

**NOP Organic Green Tea RS/SNO:** Archaeological findings indicate that green tea has been consumed for approximately 5,000 years. It has been used traditionally to aid in wound healing, regulate both body temperature and glucose levels as well as promote digestion. Green tea is dried steamed leaves from the *Camellia sinensis* plant. Epigallocatechin gallate (EGCG) is a compound found in green tea that is a potent antioxidant providing protection from reactive oxygen species.
NOP Organic Hemp Seed RS/SNO: Seeds from the Hemp or Cannabis sativa plant have been called the most nutritionally complete food source in the world. The seeds contain all essential amino acids and fatty acids in a digestible form. Hemp seed is also rich in vitamin D.

NOP Organic Honeysuckle RS/SNO: Lonicera japonica or Japanese Honeysuckle is a perennial herb native to Japan, China and Korea; however it has been successfully cultivated in the United States and Britain. The plant is considered to be high in calcium, magnesium and potassium and has been used in alternative medicines for thousands of years. Often used topically in extracts to treat inflammation and rashes, the herb has also been used on wounds to prevent infection.

NOP Organic Juniper Berry RS/SNO: Juniper berries are mostly known for their fragrant aroma. The small blue and sometimes red berries grown on shrubs that can grow up to 40 m tall. Juniper berries are used as a spice and are incorporated into a variety of dishes and liquors. Juniper is also a symbol of longevity.

NOP Organic Kelp RS/SNO: Ascophyllum nodosum is edible seaweed found in the northern Atlantic Ocean. It is claimed to be the most active seaweed on the planet and is well researched. Kelp has long fronds with large egg-shaped air-bladders. The seaweed grows slowly and can live for several decades. It has long been used as an organic fertilizer because of its macro- and micronutrient content (N, P, K, Ca, Mg, S, Mn, Cu, Fe, Zn). It is also host to cytokinins, gibberellins, betaines, mannitol, organic acids, polysaccharides, amino acids, and proteins that are beneficial.

NOP Organic Lavender RS/SNO: Lavandula officinalis or Common Lavender is a strongly aromatic flowering plant. The flowers and leaves are used as an herbal medicine either in the form of lavender oil or herbal tea. The flowers are used as a culinary herb. Lavender essential oil is commonly used as a relaxant and can be found in lotions, eye pillows, bath oils, etc. to induce relaxation.

NOP Organic Lycii Berry RS/SNO: Lycii berries, or Wolfberries, are bright red and found throughout China and Tibet. They have been highly regarded for nutritional and therapeutic benefits and are very high in antioxidant properties. Substances found in the berry may increase cellular communication and contain anti-inflammatory capabilities. Lycii berries are rich in vitamins A, B and C.

NOP Organic Nettle RS/SNO: Nettle (Urtica dioica) is an herbaceous flowering plant native to Europe, Asia and North America. Nettle has many traditional uses dating back to ancient Greece. The leaves are high in nutrients such as calcium and iron. Nettle also has astringent properties.
NOP Organic Passion Flower RS/SNO: Passion flower is a flowering plant growing mostly as vines. The leaves and roots of the plant have a long history of use among the Native Americans of North America. The leaves are used to make an infusion that is used to treat insomnia. It is also valued for its ability to alleviate pain.

NOP Organic Rosemary RS/SNO: Rosemary (Rosmarinus officinalis) is a woody, perennial herb with fragrant needle-like leaves. Native to the Mediterranean it is a member of the mint family. Rosemary is a well-known herb used in cooking. Additionally, it has some traditional medicinal uses including the revitalization of blood flow in the limbs and helping to improve memory.

NOP Organic Shiitake Mushroom RS/SNO: Shiitake mushrooms (Lentinula edodes) are an edible mushroom native to East Asia. Shiitakes have been researched for their medicinal benefits and are widely used in cosmetics. The studies have identified the polysaccharide lentinan as having immune-boosting benefits. The mushrooms are also a source of vitamin D.

NOP Organic Wild Yam RS/SNO: Dioscorea villosa is a perennial vine plant with a long woody root. Wild yam is sometimes called “colic root” or “rheumatism root” because of its antispasmodic properties. As a result, it is often used in herbal remedies to treat stomach cramps. Wild yam is also known to possess anti-inflammatory properties. A compound in wild yam, called diosgenin, is used as the basis for synthesizing several steroids including progesterone and estrogen.

NOP Organic Yerba Mate RS/SNO: Yerba mate (Ilex paraguariensis) is a species of holly native to South America. The plant is a shrub or small tree with evergreen leaves, small greenish-white flowers and red berries. Commonly used to make infusions called mate, the dried leaves and twigs have a stimulant effect slightly less potent than coffee. Yerba mate contains xanthines in the same family as caffeine, theophylline and theobromine. Mate also contains elements such as potassium, magnesium and manganese.

NOP Organic Horsetail RS/SNO: Equisetum is a genus of plants that reproduce by using spores rather than seeds. The name horsetail arose because of the branched structure of the plant that somewhat resembles a horse’s tail. The rough stems of the plant were traditionally used for scouring cooking pots as they are coated with abrasive silica. Used as an herbal remedy dating back to the ancient Romans and Greeks, horsetail was used to heal ulcers and wounds.

NOP Organic Bearberry RS/SNO: Bearberries are dwarf shrubs of the genus Arctostaphylos. They are adapted to arctic and subarctic climates. The plant contains arbutin, ursolic acid, tannic acid, hydroquinones, and some essential oils. The leaves are picked and dried for use in infusions, liquid extracts, medicinal teabags and tablets. The plant has been
traditionally used as an astringent and disinfectant and has strong bacteriostatic action against *Staphylococci* and *E. coli*.

**NOP Organic Willow Bark RS/SNO:** The use of willow bark dates back to the time of Hippocrates when patients were advised to chew on the bark to reduce fever and inflammation. Willow bark has been used throughout the centuries in China and Europe and continues to be used today for the treatment of pain, headache and inflammation. The bark of the willow contains salicin, which is a chemical similar to aspirin and is thought to be responsible for its pain-relieving and anti-inflammatory effects.