Smell of grass must mean summer

By Arthur O. Tucker

About this time of the year, I inevitably get at least one reporter calling to find out what makes grass smell like grass.

First, I have to make sure that the reporter is not talking about the “grass” of the 1960s, alias marijuana (FYI, that odor can be mimicked by burning black tea). Once I finally ascertain that the reporter is actually talking about lawns, this ends up being a long conversation on chemistry, perfumes, and Indian sweet grass baskets. That’s usually the end... until another reporter calls.

In perfumery, the characteristic chemical of cut leaves is considered to be cis-3-hexenol, also called leaf alcohol. Pyrazines, another group of chemicals, are also important in the “green” notes in flavors and fragrances and give the characteristic notes to green Bell peppers.

Until political changes, the primary source of these green notes in perfumes was a gum imported from Iran and Libya called galbanum. Galbanum gave typical notes to the so-called “green” perfumes, such as the classics Vent Vert (Balmain, 1945), Chanel No. 19 (Chanel, 1970), and Alliage (E. Lauder, 1972). Today, these green notes for perfume are primarily manufactured, not grown.

Coumarins give the odor to mown-hay mown. Coumarins are important in the chypre-type perfumes, such as the classics Chypre (Coty, 1917) and Canoe (Dana, 1935). Sweet vernal grass (Anthoxanthum odoratum) is often included in forage and grass mixtures and is highly scented of coumarins when cut and dried; this odor is familiar to many farmers and other residents who live nearby farm fields.

The sweet grass of the American Indians is another sweet grass (Anthoxanthum nitens, syn. Hierochloe odorata), sometimes used in smudge sticks or woven into tiny baskets (the so-called “sweet grass” of the baskets from the Low Country of the Carolinas is another grass altogether, Muhlenbergia sericea). Sweet grasses, probably along with other forages, such as sweet clovers (Melilotus spp.) are harvested in France for a product called floue that is used in tobacco flavoring.

Pipe tobacco may also be flavored with another source of coumarins, tonka (Dipteryx odorata). Herb gardeners should be familiar with two other sources of coumarins, sweet woodruff (Galium odoratum) and lady’s bedstraw (Galium verum); the former is used to flavor Rhine wines to create a new product, May wine.

All these sources of coumarin should be avoided by people taking blood thinners, as they will thin the blood even further (Warfarin, a rat poison, is also a coumarin that causes internal bleeding and eventual death in high doses).

If you are not taking blood thinners, below is a recipe for a Mai Bowlie, made with sweet woodruff for your next garden party.

1 gallon white, Rhine-type wine (I’ve used white grape juice for a temperance version)
12 sprigs sweet woodruff
1 pkg. (10 oz) frozen, sliced, presweetened strawberries
1 quart fresh whole strawberries, thickly sliced

Dry three to four of the sweet woodruff sprigs to wilting (use a microwave for a few seconds if rushed). Add wilted sprigs to wine in the bottle overnight before making punch (steeping too long will make the grape juice taste like old tea bags). Pour wine into a large punch bowl. Mash up sliced strawberries and stir into the wine. Place an ice ring (especially nice made with ginger ale and rose petals) into bowl.

Add sliced berries. Garnish with remaining fresh sweet woodruff sprigs, and float tiny Spring blossoms (violets, Johnny jump ups, small rose petals, etc.). Place a berry slice in each cup as you ladle the punch. Makes 40 to 50 servings.

Editor’s note: On the campus of Delaware State University, the Claude E. Phillips Herbarium is Delaware’s center for research, education, and outreach about plant identification, locations, and uses. Call 302-857-6452 (Dr. Susan Yost) to arrange a tour of the Herbarium, and call 302-857-6468 (Dr. Arthur Tucker) for more information about this article.