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BELTSVILLE AGRICULTURAL RESEARCH CENTER
BELTSVILLE, MARYLAND 20705

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Subject: Colubrina texensis

To: POSI

Through: Arthur S. Barclay

Large samples of Colubrina texensis were collected near Laredo and near Lake Corpus Christi. A long handled pick was the most useful tool in collecting Colubrina; the above ground parts can be easily removed with one accurate hit at the base. Fresh plants were loaded and packed tightly in an open 81 cubic foot pickup bed. A total of 12 loads amounted to 1,160 pounds dry weight.

Colubrina texensis was usually seen as a small much-branched shrub from $1\frac{1}{2}$ to 3 feet tall. The above ground parts of the plant may yield from $\frac{1}{4}$ to $\frac{1}{2}$ pound in dry weight. Some plants near Laredo were 4-5 feet tall and may yield 1 to 2 pounds. The roots have a light to blood red slash similar to what I have seen in African species of Maytenus stems, and also probably similar to the closely related genus Lasiodicus that has been described as red, pink to purplish-red. An occasional root was included in the 1,150 pound sample of twig-leaf-fruit. About 10 pounds of roots were kept separate.

Green fruits were present upon arrival (May 31) but on the last day of collecting (June 14) they had a purplish tinge. A few ounces of seed were obtained from fruits that had persisted from the previous year. Most of the last season's fruits were washed off during the 10 inches of rain that fell on one day in the first week of June. A $\frac{1}{4}$ pound fruit sample was taken from green fruits.

I observed Colubrina in many places between San Antonio and Corpus Christi and between Corpus Christi and Laredo. Most often it was seen scattered along fences or edges of open brushlands. Other sites include secondary scrub on limestone, recently plowed fields with little other vegetation and ditches or banks along highways and railroad tracks. Colubrina was unusually abundant in some spots along railroad tracks that ran parallel to Highway 359 between Sandia and Alice.

Colubrina texensis seems to prefer caliche soils. This has been reported for some of the following associated shrubs that were collected: Leucophyllum frutescens, Condalia hookeri, Nolina erumpens, Salvia ballotaeiflora, Berberis trifoliata, Diospyros texana, Eysenhardtia texana, Prosopis pubescens, Zanthoxylum fagara, Sophora secundiflora and Acacia berlandieri. The purple sage, Leucophyllum frutescens, is a conspicuous indicator of

caliche soils and Colubrina texensis always seemed to be near by. Some roadside herbs were Palafoxia hookeriana, Linum rigidum and Centaureium texense.

Colubrina texensis was rather erratic in its frequency of occurrence, making it difficult to judge sites for yield and feasibility in collecting. One exception was the occasional thickets up to $\frac{1}{4}$ mile in length seen in ditches along railroad tracks. Other locations, such as the one reported by Elkins south of San Diego, Colubrina plants were observed scattered anywhere from 5 feet to $\frac{1}{2}$ mile apart. Along a 6 mile stretch of highway beginning south of San Diego, one might obtain 500 pounds; however, this quantity was also available within $\frac{1}{2}$ mile near Sandia.

Planning in the recent procurement of Colubrina texensis relied on reconnaissance by one of our suppliers and the Boy Scouts of America. Although the Gulf Coast Council knew the plant (as "hog plum") and received confirmation of its presence in their various districts, the economics of selecting sites to collect it were overlooked. Because Colubrina is fairly widespread in southern Texas does not mean we can collect it just anywhere. We should have confirmed or pinpointed our own practical collecting sites in advance to allow the BSA enough time to focus their volunteers on our selected sites. Future massive samples will still require reconnaissance. Also, we might check with the local offices of the Soil Conservation Service.

Drying samples in southern Texas could be a problem. Near the coast humidity is rarely below 80%. During the first week of June there were almost daily thunder showers. Ten inches or more of rain fell on two separate days.

Natural brushlands seen along highways in south Texas were bordered by fences. According to the BSA, permission from the landowner to cross the fence is necessary if you value your life. Also, it is against the law in some counties to collect plants along the highway (right of way).

Between the weather, the ranchers and the County Highway Department, a botanist working in southern Texas could find himself in a real dilemma.

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