

BROWN & WILLIAMSON TOBACCO CORPORATION

RESEARCH & DEVELOPMENT

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TO: E. M. Cavagnollo - Souza Cruz
Florianopolis, Brazil

FROM: P. R. Fisher

CC: J. Kothe - Souza Cruz

DATE: June 4, 1990

RE: Your letter May 29, 1990

Hopefully this letter will clarify B&W's position on the items you raised.

Item #1: Y1 - Commercial Scale

The commercial planting of Y1 will be with the Repanda and Suaveolens. The pollen-free BC₄ line can not be planted due to the following:

We have no chemistry or smoke evaluations on the BC₄ lines. Selections were made from the BC₃ population based on nematode resistance and plant type. To generate a BC₄ line the BC₃ line was backcrossed to Y1, thereby creating a breeding line population segregating for nematode resistance. The next step would have been to self these lines and begin testing the chemistry and smoke quality. B&W requires three separate field tests of a line before scaleup is considered. Since we do not have adequate information on this line, we do not approve the planting of this line.

The conventional breeding pathway is being used as a backup to the genetic engineering path and no future conventional work is planned. Obviously much effort went into the production of the BC₄ pollen-free line that could have been avoided if this had been discussed with B&W prior to this work. This must have cost Souza Cruz a great deal of money to produce 13.2 pounds of seed that must not be used. In fact, Juarez told me he would personally observe the destruction of this seed. We must avoid this from occurring in the future.

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Will will have enough seed of Line 502, our best double-haploid pollen-free nematode resistant line to plant 1% to 4% of the crop. That seed will be available mid-July. B&W would like to plant a minimum of 1% and is willing to go to 4% of the crop with this line. Field tests, chemistry and smoke evaluation, show this line is very comparable to conventional Y1. Please inform us of the quantity Souza Cruz is willing to plant.

Item #2: Research Projects

Total research plots will be approximately the same as this past season. Arrangements will be made to get you the special material by mid-July.

Y1 Nematode Lines

We will have six lines which includes Y1 and 502. Final decision will be made after field evaluation on the Jones Farm (prior to July 15).

Granville Wilt

As agreed in January, we will have two locations, and the number will not exceed last year's trial.

American Aromatic Tobacco

We will be evaluating the redried strip of these lines as soon as it arrives in the U.S. The quality of the hand samples we received was comparable to U.S. grown material. Tentatively we will want to grow some on two farms in the burley area and two farms in Maryland area. Plot sizes will be determined after we examine the redried strip. In addition to the 9A, 40A, and 37A, we will have two more lines that we would like approximately 250 plants of at one burley location and one Maryland location.

Item #3: Seed Production in Brazil

We will let you know more details in the near future. For now, please plan to plant enough CMS plants to produce 24 pounds of seed. I will be interested in seeing your report on seed yields per pod/per plant/per hectare. When will this report be ready?

Concerning another topic, the only yield data from field trials we have received to date are those from Espindola. When will we have the requested yield data on the Y-1 experimental plots?

P. R. F.
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