

# OHIO'S BURLEY TOBACCO AGRICULTURE: A PRIMARY REGIONAL CASH CROP<sup>1</sup>

W. ROBERT JENCKS

*Department of Geography, Miami University, Oxford, Ohio 45056<sup>2</sup>*

## ABSTRACT

Ohio's Burley tobacco agriculture is concentrated in a relatively small portion of southern Ohio and is significant as a primary cash crop for the region. In four of the 10 leading Burley-tobacco-producing counties, Burley tobacco ranks as the leading cultivated crop of the county, and in one county leads all agricultural commodities produced there in value. The type of farm on which Burley tobacco is grown varies from the predominately marginal farms situated in the hilly portions of the growing region to general-type farms located on more level land. Two crops which have been suggested as possible alternatives or additions to improve the economy of Burley tobacco growers are grapes and strawberries.

## INTRODUCTION

Ohio has long been a producer of tobacco and at various periods has produced three different classes—Eastern Ohio Export (U. S. Type 71), Cigar filler (U. S. types 42-44), and Burley (U. S. type 31) (Jencks, 1968, p. 4). Eastern Ohio Export tobacco, which is no longer grown, had a period of importance in southeastern Ohio from approximately 1840 to 1880. Cigar filler tobacco enabled the Miami Valley region to be the most important producing area from approximately 1880 to 1940, and this tobacco is still grown there today on approximately 1700 acres. Burley tobacco, grown primarily in southern Ohio, has a period of importance which began during the First World War, when cigarettes first became popular, and continues to the present.

Cigarettes account for nearly 90 percent of the consumption of Burley tobacco in the United States, the remaining 10 percent of this tobacco being used for pipe and chewing tobacco. In 1965, Ohio's \$11.2 million Burley-tobacco production ranked fifth in the United States, preceded only by Kentucky, Tennessee, North Carolina, and Virginia (Jencks, 1968, p. 17). These five states, including Ohio, comprise the major portion of the Burley-tobacco belt in the United States (fig. 1).

Burley tobacco is a highly intensive specialty crop, nearly 400 hours of labor being required to prepare the products of one acre of tobacco for market (Jencks, 1968, p. 35). Generally, Burley-tobacco allotments in Ohio are under one acre in size, ranging from less than one-tenth of an acre to slightly over 20 acres (unpublished 1967 figures received from the Ohio State Office of Agricultural Stabilization and Conservation Service; Jencks, 1968, p. 87), with the average Burley-tobacco allotment in 1970 being approximately 0.80 of an acre. The allotments yielded at an average rate of over 2800 pounds per acre, with a production worth in excess of \$2000 (U. S. Department of Agriculture, 1970).

## STUDY PROCEDURE

Ohio's Burley-tobacco production was calculated from 1967 statistics supplied by the Ohio State Office of Agricultural Stabilization and Conservation Service and mapped by township. In order to determine the economic significance of Ohio's Burley-tobacco-producing area, a comparison was made between Burley tobacco's monetary farm receipt (by county) and the monetary farm value of other crops and agricultural commodities in the area studied. In addition, the author visited auction warehouses, and interviewed and corresponded with county

<sup>1</sup>Manuscript received January 10, 1971.

<sup>2</sup>Present address: Geography and Geology Department, Indiana State University, Terre Haute, Indiana 47809.

agricultural agents, farmers, and state and national officials in order to gather more information about Ohio's Burley-tobacco production. Analysis of all these data provided a meaningful evaluation of the importance of Burley tobacco as a cash crop in an area of mixed and marginal farming in Ohio. It is the objective of this paper to present and discuss these data and to summarize the importance of this crop in Ohio.

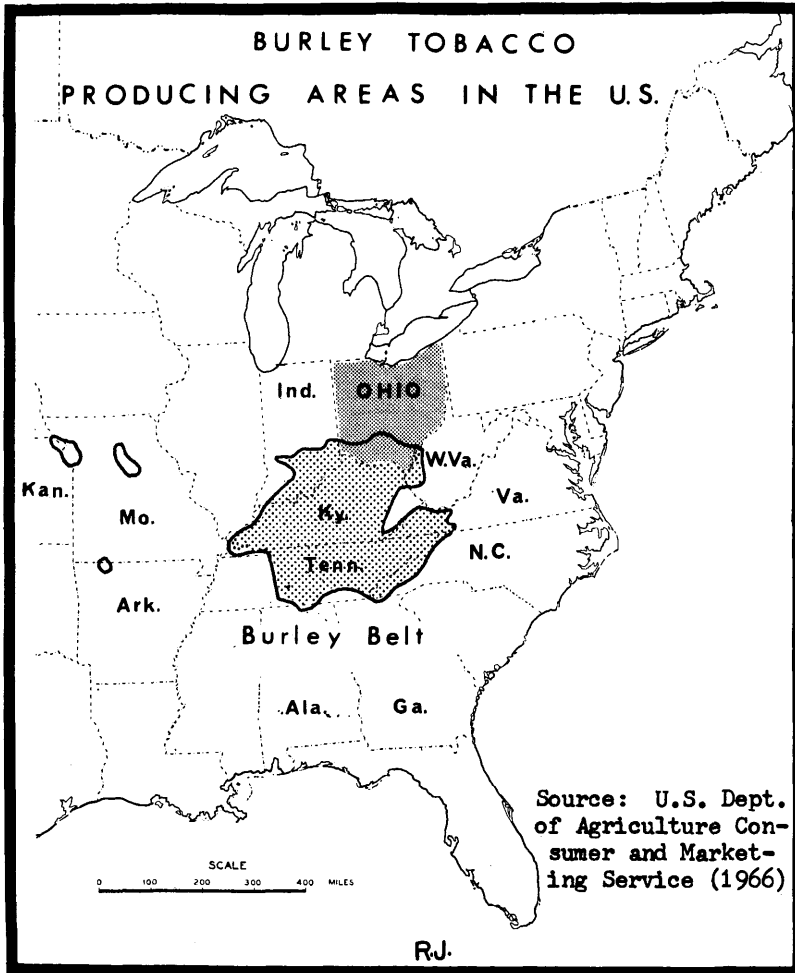


FIGURE 1. Burley-tobacco producing areas in the United States. In addition to these areas, Illinois, South Carolina, and Texas also produce Burley tobacco, but their production is negligible.

#### DISCUSSION

In 1966, tobacco ranked thirteenth among the agricultural commodities produced in Ohio, and comprised 0.96 percent of the total state agricultural cash receipts (Dougan and McDonald, 1967, p. 5). The value of \$11.2 million for Burley tobacco was approximately 90 percent of the state's total value for tobacco in 1966, or 0.86 percent of the state's total agricultural value (statistics calculated from 1966 *Ohio Farm Income*, issued by The Ohio State Agricultural Research

and Development Center; Jencks, 1968, p. 99). Though Burley-tobacco sales may be considered slight, when compared to the total agricultural receipts for the state, this income is concentrated in a relatively small area, in which area it represents a significant agricultural crop.

The greatest portion of Ohio's Burley tobacco is grown in two counties, Brown and Adams, which together comprise 57 percent of the total allotted Burley-tobacco acreage (Table 1), and which receive 56 percent of the total Burley-tobacco income

TABLE 1  
*1967 Burley Allotments in Ohio*

Counties listed in order of total value of Burley tobacco production	No. of farms with Burley tobacco allotment	Total Burley tobacco allotment acreage	Average size of Burley tobacco allotment per farm
Ohio	10,217	7,933.10	.77
Brown	2,176	2,506.57	1.15
Adams	2,300	1,991.42	.86
Clermont	1,146	882.20	.76
Gallia	1,154	936.87	.60
Highland	1,072	560.91	.52
Lawrence	725	389.41	.53
Scioto	521	315.19	.60
Pike	206	100.81	.48
Jackson	139	60.53	.43
Hamilton	55	57.73	1.04

Source: Statistics supplied by the state Agricultural Stabilization and Conservation Service, 1967.

(unpublished 1967 statistics from figures received from the Ohio State Office of Agricultural Stabilization and Conservation Service; Jencks, 1968, p. 101). In addition to Brown and Adams Counties, there are eight other counties which grow enough Burley tobacco for their receipts to appear on the tabulated list of agricultural commodities for the State of Ohio (Table 2). These counties, in order of importance, are as follows: Clermont, Gallia, Highland, Lawrence, Scioto, Pike, Jackson, and Hamilton. Combined, all of these 10 counties (including Brown and Adams) account for 97 percent of the total Burley-tobacco acreage allotments in the state and for nearly all of the Burley-tobacco receipts. The remaining allotments are found in 13 other counties located in the southern half of the state, but the economic importance of Burley tobacco to these counties is insignificant, and so therefore they will not be discussed.

Of the 10 named counties, only Brown County has Burley tobacco consistently ranked as being its major agricultural commodity (Table 2). In three other counties—Adams, Clermont, and Gallia—Burley tobacco is ranked as the leading cultivated crop of the county. Thus, Burley tobacco is a leading cash crop in these four southern Ohio counties (Table 2).

Burley-tobacco production in Ohio is mainly concentrated in two areas. The locations of these areas are shown in Figure 2, which was constructed by compiling the harvested acres of each county in 1967 by township.

The area of greatest Burley-tobacco production in Ohio, yielding between 200 and 400 acres of tobacco per township, is in the southern portions of Brown, Adams, and Clermont Counties (fig. 2). In this area of Ohio, an east-west belt approximately ten-miles wide on the north side of the Ohio River, is found the most desirable soils and topography for raising Burley tobacco. The soils are lime-based and belong to the Illinoian High-Lime Till Soil Region and the Lime-

stone and Shale Residual Region (fig. 3). The topography of this area of concentrated production is mostly eroded hill country, which provides two valuable growing conditions—adequate drainage and an abundance of lime-based soils with little glacial till.

Immediately north of this area of high productivity, in an area where the topography becomes more level and glacial-till soil predominates, the acreage of Burley tobacco decreases considerably. Although the crop is grown locally in these northern townships, the quality of the leaf is usually not as acceptable as is that produced on the better drained lime-based soils to the south. Improper soil drainage and the lack of the desirable lime-based soils are the major reasons for Burley tobacco's lower production both here and in southeastern Ohio. The

TABLE 2  
*Rank of the eight major agricultural commodities within each county for 1966*

County	Total Cash Rec. from Sales (thous.)	1	2	3	4	5	6	7	8	Others
Brown	13,026	28% tobacco	17% dairy	16% cattle	13% hogs	12% soybeans	6% corn	3% poultry	2% wheat	3% others
Adams	9,762	29% dairy	27% tobacco	20% cattle	9% hogs	6% poultry	4% corn	2% wheat	1% soybeans	2% others
Clermont	7,231	18% dairy	16% cattle	16% tobacco	16% soybeans	11% hogs	7% corn	7% poultry	2% wheat	7% others
Gallia	5,518	31% dairy	30% cattle	15% tobacco	8% poultry	5% hogs	3% corn	1% veg.	1% forest	6% others
Highland	16,930	32% hogs	19% cattle	16% dairy	9% corn	8% soybeans	5% wheat	3% tobacco	3% poultry	5% others
Lawrence	2,848	24% cattle	21% dairy	13% poultry	13% grh. & nur.*	12% tobacco	5% corn	4% veg.	3% hogs	5% others
Scioto	5,559	20% dairy	20% cattle	14% poultry	14% veg.	11% corn	6% tobacco	6% hogs	3% grh.&nur.	6% others
Pike	4,545	22% cattle	20% corn	18% poultry	15% dairy	9% hogs	6% soybeans	2% forest	2% tobacco	6% others
Jackson	2,724	36% cattle	23% dairy	14% poultry	9% hogs	7% corn	2% soybeans	2% tobacco	2% hay	5% others
Hamilton	7,093	47% grh.&nur.	21% veg.	8% dairy	7% corn	6% cattle	3% hogs	3% poultry	1% tobacco	4% others

\*Greenhouse and nursery.

Source: Ohio Agricultural Research and Development Center, *1966 Ohio Farm Income*, Dept. Series A.E. 411 (Columbus: The Ohio State University, 1966), pp. 22-25.

sparse Burley acreage found in other townships scattered throughout the remaining Burley-tobacco-producing counties in Ohio is a result of the relatively poor physical qualities of the land for growing Burley tobacco in those areas. Although today's modern agricultural technology enables Burley tobacco to be produced in other areas, government control has restricted this movement.

The economic returns from Burley-tobacco raising are more important in the hilly portions of southern Ohio, where farming practices are limited by the topography, than they are farther to the north, where the land is more accommodating for general-type farming. In the hilly Burley-tobacco-producing townships of Brown, Adams, and Clermont Counties, where Burley tobacco is the main crop, a considerable portion of the remaining tillable land, much of which is marginal, is in the Soil Bank Program (through which the government pays farmers to keep their land out of production in an attempt to control the surplus of certain crops). Not to be confused with these marginal farms are other, more prosperous farms,

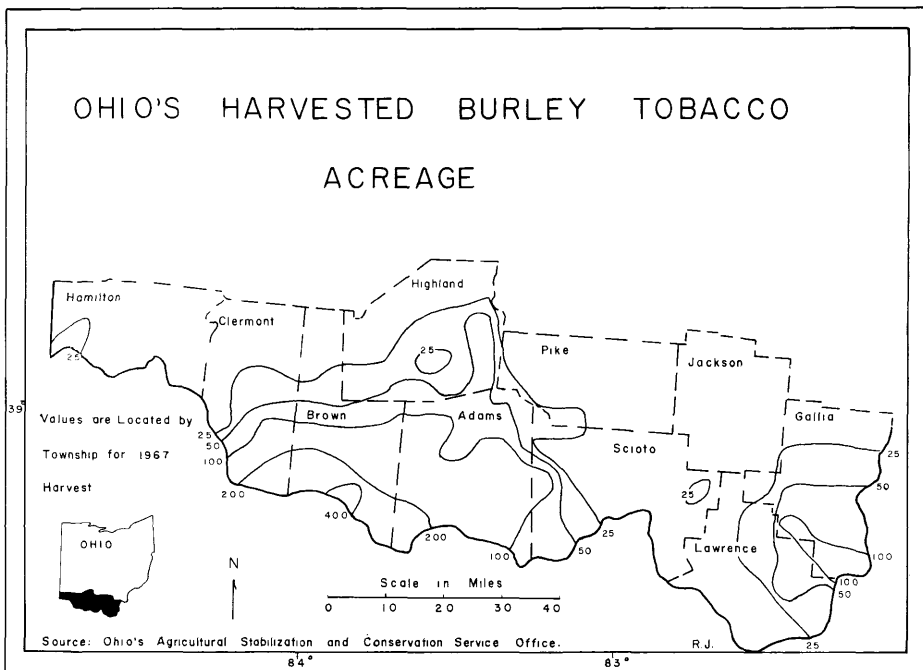


FIGURE 2. Isopleths demonstrate the quantity of harvested Burley tobacco acres for Ohio in 1967. Values are located by township.

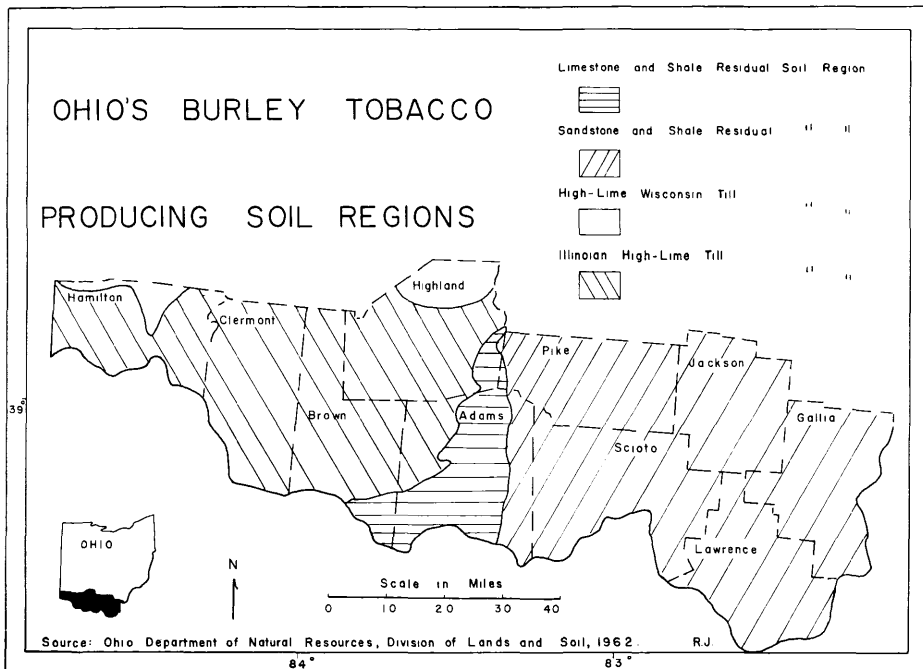


FIGURE 3. Map depicting Ohio's major soil types on which Burley tobacco is grown.

which account for approximately one-sixth of Ohio's Burley-tobacco acreage and which have Burley-tobacco allotments of one or more acres. In most instances, these are large livestock farms which, though they are located on marginal land, are much more successful and should not be classified in the same category as the marginal farms mentioned above (farmers on some of the marginal farms in Brown, Adams, and Clermont Counties do raise small number of hogs and cattle for their own use, but they have neither the proper land nor the money to invest in order to raise livestock on a commercial scale). The majority of older people in this marginal area frequently rent their tobacco allotments on shares to younger farmers because they are too old for the great amount of hand labor required to raise this crop. Any additional income that they might receive comes primarily from Social Security pensions and Soil Bank payments. In contrast, most of the younger farmers have part-time jobs in nearby towns or in the Cincinnati area to supplement their income.

In Highland County and in the northern portions of Brown, Adams, and Clermont Counties, where the topography is more gently rolling to flat, the farms generally market field crops and dairy products. In addition, farm buildings and houses are in much better condition, and the total size of farms is usually larger. Because their land is more tillable and, therefore, more profitable to farm, farmers located in this area have less land in the Soil Bank Program. Although Burley tobacco is still grown as a cash crop, the allotment sizes are usually smaller, because tobacco is not the farmer's main interest, and the people of this area are not so dependent upon the income received by this crop.

#### CROP ALTERNATIVES FOR BURLEY-TOBACCO PRODUCERS

Because the area of greatest Burley-tobacco production in Ohio is the area having farmers with relatively low levels of living, it is evident that if the people in the hilly, tobacco-dominant area were to be engaged in other types of agriculture, they might receive greater economic returns. Several knowledgeable men who have worked with agricultural problems in this section of Ohio have proposed alternatives to give better development to the area. The County Agricultural Extension Agent for Brown County suggested two crop alternatives that southern Ohio farmers might consider—grapes and strawberries. Both of these crops compare favorably with Burley tobacco's economic pattern, since they require intensive labor and return relatively high yields per acre (interview with Earl Baylor, County Extension Agent of Brown County, in Georgetown, Ohio, April 2, 1968).

Viticulture, for many reasons, appear to have the best potential for succeeding. The climate in southern Ohio is suitable although not optimal, and the sloping topography and the well-drained soils would provide adequate growing conditions. There is, also, a potential market with Meir's Winery, located near Cincinnati. Furthermore, vitaculture once flourished in southern Ohio until disease eradicated the vineyards and this industry could certainly be established again. At present, The Ohio State University Agriculture Research and Development Center at Ripley, Ohio, has a number of experimental plots of grapes scattered throughout southern Ohio, with the intention of re-establishing the viticulture industry.

As another alternative crop, strawberries might well be grown in southern Ohio, especially considering that the annual consumption of fresh strawberries in Ohio is about five million pounds. Despite this big demand, almost 90 percent of all strawberries coming into the Cincinnati market area during the harvest season are from out of state (Cravens, 1967, p. 23-25). Although best suited for sandy soils, strawberries can be effectively grown in southern Ohio, according to Jim Wells, Manager of The Ohio State Agricultural Research and Development Center, Ripley, Ohio. However, he stated that an efficient marketing system for strawberries presents more of a problem than does their cultivation, if they are

to be grown commercially, since the strawberries now grown are mostly sold on an individual-harvest basis.

Grape and strawberry raising, if successfully exploited, would certainly mean an economic boost for the southern Ohio region. Any change must be preceded, however, by properly directed education to inform the farmers of these new, profitable agricultural techniques and marketing methods.

#### SUMMARY

Most of Ohio's Burley-tobacco production (57 per cent of the total Burley-tobacco acreage allotments and 56 percent of the total value) occurs in two counties: Brown and Adams. Almost all remaining acreage allotments are dispersed among eight other southern Ohio counties: Clermont, Gallia, Highland, Lawrence, Scioto, Pike, Jackson, and Hamilton. The types of farms on which Burley tobacco is grown varies from the predominantly marginal farms in the hilly, southern townships, farms that produce Burley tobacco almost exclusively, to the more prosperous farms engaged in general-type farming practices located on relatively level land in the more northern townships.

Agricultural research is being conducted by The Ohio State University Research and Development Center to determine what, if anything, can be done to improve the economy in the concentrated Burley-producing areas. Two crops that have been suggested as possible alternatives or additions for Burley tobacco growers are grapes and strawberries.

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