

Table 1. Comparison of rainfall, peanut heat units (DD₅₆) and cotton degree-days (DD₆₀) over the period from 1995 to 2005.

Month	Rainfall (in.)											
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Normal*
May	4.92	4.00	2.54	2.78	1.04	5.52	4.19	3.98	7.14	4.77	4.78	3.83
Jun	5.20	4.50	0.69	2.80	2.72	6.09	8.78	1.66	4.10	5.10	2.64	4.25
Jul	2.95	9.12	10.74	5.07	5.39	4.33	3.04	5.53	4.98	12.53	5.19	5.90
Aug	3.03	4.73	1.24	5.29	9.33	7.13	4.07	2.22	3.50	11.00	4.50	5.75
Sep	2.96	7.98	1.99	5.97	23.47	4.17	1.64	2.96	11.81	5.15	3.08	4.46
Oct	4.78	5.10	2.89	3.03	7.76	0.03	1.00	4.89	4.40	4.52	5.68	3.46
Total	23.83	35.43	20.09	24.94	49.71	27.27	22.72	21.24	35.93	43.07	25.87	27.65

*Normal is the 73-yr mean of records maintained at the Tidewater AREC, Suffolk.

Month	Peanut Heat Units											
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Avg.
May	339	340	279	373	347	425	351	365	313	508	248	353
Jun	524	569	509	581	503	583	589	627	537	544	549	556
Jul	731	624	667	680	722	592	605	731	667	647	710	671
Aug	665	545	576	630	652	564	689	681	660	548	680	626
Sep	374	422	416	507	399	396	403	488	446	429	506	435
Oct	272	189	202	203	187	210	240	242	184	168	240	212
Total	2905	2689	2649	2974	2810	2770	2877	3134	2807	2844	2932	2854

Month	Cotton Degree Days (DD ₆₀)											
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Avg.
May	257	246	195	274	254	318	255	271	216	395	169	259
Jun	419	459	330	442	359	466	472	513	421	426	433	431
Jul	537	502	493	544	546	451	484	615	543	523	587	530
Aug	462	423	435	509	479	442	568	564	536	427	557	491
Sep	286	320	309	398	295	311	304	373	334	320	393	331
Oct	200	118	139	136	123	144	172	162	116	100	158	143
Total	2162	2068	1900	2303	2056	2132	2255	2498	2166	2191	2297	2184

Table 2. Crop production in record year for yield compared to 2005.

Crop	Statistics of record year for yield			2005 projection*	
	Year	Acreage	Yield/A	Acreage	Yield/A
Peanut.....	2004	32,000	3,250 lb	22,000	2,900 lb
Soybean.....	2004	530,000	39.0 bu	520,000	29 bu
Corn.....	2000	330,000	146 bu	360,000	124 bu
Cotton (lint)..	2004	81,000	956 lb	92,000	835 lb
Wheat	1997	260,000	67 bu	170,000	66 bu

* Based on crop production estimates in November and December 2005 by the Virginia Agricultural Statistics Service at <http://www.nass.usda.gov/va>.

Table 3. Estimated loss in yield as a result of peanut diseases in 2005.

Disease	Causal organism	Percent loss
Early leaf spot	<i>Cercospora arachidicola</i>	2.0
Late leaf spot.....	<i>Cercosporidium personatum</i>	0.2
Pepper spot & leaf scorch	<i>Leptosphaerulina crassiasca</i>	0
Web blotch.....	<i>Phoma arachidicola</i>	0.5
Botrytis blight	<i>Botrytis</i> sp.	0
Peanut rust.....	<i>Puccinia arachidis</i>	ND*
Sclerotinia blight.....	<i>Sclerotinia minor</i>	1.0
Sclerotinia blight.....	<i>Sclerotinia sclerotiorum</i>	ND*
Southern stem rot	<i>Sclerotium rolfsii</i>	1.0
Stem, root, & pod rot	<i>Rhizoctonia</i> spp.	0.1
Botrytis blight	<i>Botrytis</i> sp.	Trace
Pythium pod rot.....	<i>Pythium</i> spp.	Trace
Tomato spotted wilt virus	<i>Tospovirus</i>	1.0
Cylindrocladium black rot (CBR)....	<i>Cylindrocladium parasiticum</i>	6.0
Nematode damage.....	Root knot, sting, ring, etc.	3.0
Total		14.8**

* Not detected.

** The value of loss estimate equals 2.36 million dollars in farm income based on an estimated total production of 31,900 tons and a mean value of \$425 per ton in Virginia.

Table 4. Estimated loss in yield as a result of soybean diseases in 2005.

Disease	Causal agent(s)	Percent loss
Seedling diseases	---various---	0.5
Downy mildew.....	<i>Peronospora manshurica</i>	Trace
Frogeye leaf spot.....	<i>Cercospora sojae</i>	1.5
Phytophthora root & stem rot	<i>Phytophthora megasperma</i> f.sp. <i>glycinea</i>	0
Anthrachnose	<i>Colletotrichum truncatum</i>	1.0
Pod & stem blight	<i>Diaporthe phaseolorum</i> var. <i>sojae</i>	0.5
Stem canker.....	<i>Diaporthe phaseolorum</i> var. <i>caulivora</i>	0.1
Sclerotinia stem rot	<i>Sclerotinia sclerotiorum</i> and <i>S. minor</i>	0
Southern blight.....	<i>Sclerotium rolfsii</i>	0.2
Root & lower stem rot.....	<i>Rhizoctonia</i> spp.	Trace
Purple seed stain	<i>Cercospora kikuchii</i>	0.2
Cercospora blight.....	<i>Cercospora kikuchii</i>	0.8
Brown spot.....	<i>Septoria glycines</i>	0.5
Red crown rot.....	<i>Cylindrocladium parasiticum</i>	0.3
Brown stem rot.....	<i>Phialophora gregata</i>	0.3
Charcoal rot.....	<i>Macrophomina phaseolina</i>	Trace
Viruses	SMV, PMV, BPMV, etc.	Trace
Bacterial pustule.....	<i>Xanthomonas phaseoli</i>	Trace
Bacterial blight.....	<i>Pseudomonas glycinea</i>	0.2
Soybean cyst nematode.....	<i>Heterodera glycines</i>	2.0
Other nematodes	various	1.9
Total loss (%).....		10.0*

* The loss estimate equals 1.71 million bushels based on production of 15.37 million bushels in 2005. At a value of \$5.50/bu, the loss in revenues at the farm gate would be 9.41 million dollars.