

National Agricultural Statistics Service USDA, Hawaii Field Office 1428 S. King Street Honolulu, HI 96814-2512 Telephone: (808) 973-9588 FAX: (808) 973-2909 Internet Web Site http://www.nass.usda.gov/hi

Frequency: Monthly

# HAWAII PAPAYAS

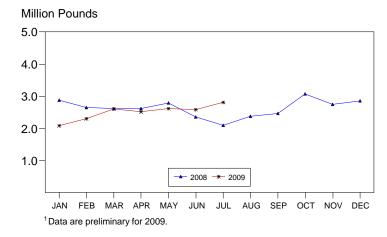


Release: September 17, 2009

# MORE FRESH PAPAYA IN JULY

Hawaii fresh papaya utilization is estimated at 2.8 million pounds for July 2009, up 9 percent from June 2009 and 34 percent above July 2008. Fresh utilization for 2009 so far totaled 17.5 million pounds, down 3 percent when compared with the same period in a year ago.

orchards experienced In July, warm weather mixed with variable showers benefitting flowering and fruit ripening. Some gaps in the fruit columns were notice due to previous heavy rains earlier in the Young plantings made year. good Favorable helped progress. weather field growers keep up the usual maintenance.



# PAPAYA: Fresh Utilization, State of Hawaii, 2008-2009 <sup>1</sup>

Papaya growers are expected to receive an estimated 45.0 cents per pound for fresh fruit in July, 2 percent (1.0 cent) higher than June, but 11 percent (5.3 cents) below a year ago.

| Month |                    |            | Year ago     | Year-to-date |           |        |        |  |  |  |
|-------|--------------------|------------|--------------|--------------|-----------|--------|--------|--|--|--|
| MONUT | Local <sup>2</sup> | Intrastate | Out-of-State | Total fresh  | i cai ayu | 2008   | 2009   |  |  |  |
|       | 1,000 pounds       |            |              |              |           |        |        |  |  |  |
| June  | 252                | 1,163      | 1,170        | 2,585        | 2,350     | 15,895 | 14,700 |  |  |  |
| July  | 262                | 1,268      | 1,275        | 2,805        | 2,095     | 17,990 | 17,505 |  |  |  |

### FRESH PAPAYA UTILIZATION, STATE OF HAWAII, 2009 WITH COMPARISONS<sup>1</sup>

<sup>1</sup> Data are preliminary for 2009.

<sup>2</sup>On island of production.

# PAPAYA ACREAGE, STATE OF HAWAII, 2009 WITH COMPARISONS<sup>1</sup>

|                                  | Total acreage in crop |       |       |            |            |      |       |       |  |  |  |
|----------------------------------|-----------------------|-------|-------|------------|------------|------|-------|-------|--|--|--|
| County                           | Ma                    | arch  | Ju    | ine        | September  |      | Dece  | ember |  |  |  |
|                                  | 2008                  | 2009  | 2008  | 2009       | 2008       | 2009 | 2008  | 2009  |  |  |  |
| Hawaii                           | 1,820                 | 2,150 | 1,840 | 1,900      | 2,110      |      | 2,220 |       |  |  |  |
| Honolulu/Kauai/Maui <sup>2</sup> | 220                   | 180   | 200   | 175        | 195        |      | 190   |       |  |  |  |
| State                            | 2,040                 | 2,330 | 2,040 | 2,075      | 2,305      |      | 2,410 |       |  |  |  |
|                                  |                       |       | Т     | otal harve | sted acres | 3    |       |       |  |  |  |
| Hawaii                           | 1,275                 | 1,350 | 1,185 | 1,200      | 1,185      |      | 1,330 |       |  |  |  |
| Honolulu/Kauai/Maui <sup>2</sup> | 155                   | 120   | 130   | 115        | 135        |      | 130   |       |  |  |  |
| State                            | 1,430                 | 1,470 | 1,315 | 1,315      | 1,320      |      | 1,460 |       |  |  |  |

<sup>1</sup>Data are preliminary for 2009. <sup>2</sup>Kauai and Maui combined with Honolulu to avoid disclosure of individual operations. <sup>3</sup>Bearing acres where papayas were harvested.

# FRESH PAPAYA FARM PRICE, STATE OF HAWAII, 2008-2009

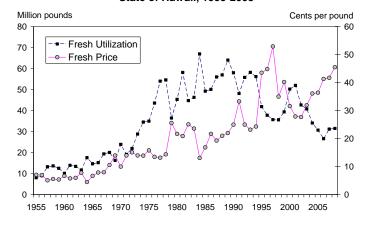
| Year              | Jan.            | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sep. | Oct. | Nov. | Dec. | Average |
|-------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|---------|
|                   | Cents per pound |      |      |      |      |      |      |      |      |      |      |      |         |
| 2008              | 43.0            | 44.8 | 47.4 | 47.8 | 49.7 | 49.2 | 50.3 | 49.4 | 47.4 | 42.1 | 39.1 | 39.0 | 45.5    |
| 2009 <sup>1</sup> | 46.0            | 50.0 | 48.0 | 45.0 | 44.0 | 44.0 | 45.0 |      |      |      |      |      |         |

<sup>1</sup> Data are preliminary for 2009.

# 2008 Papaya Output Slightly Higher

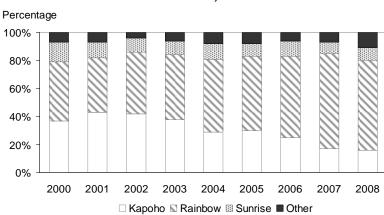
In 2008, papaya output totaled 33.5 million pounds, slightly above the previous year. Weather for 2008 began cool, windy, and wet. Conditions turned dry thereafter prompting various water restriction measures throughout the State. Orchards depending on natural rainfall were most affected with slower growth and fruit development. Winter rains helped to replenish wells and soil moisture levels. Growers stepped up spraying efforts to limit disease outbreaks. The high costs of inputs, insects and diseases control, and a shortage of seed were some grower concerns.

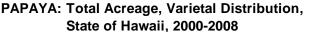
PAPAYA: Fresh Utilization and Price, State of Hawaii, 1955-2008



The biotechnology variety Rainbow made up

64 percent of total acres in 2008, compared with 68 percent in 2007. Rainbow is resistant to Papaya Ringspot Virus (PRV), a virus that devastated the Hawaii papaya industry from 1993 to 1999. The Kapoho variety was the standard for the papaya industry for many years; however, Kapoho is susceptible to PRV. Yields of Rainbow are higher during the first year of harvest compared to the Kapoho variety. In the second year of harvest, yields for Rainbow are comparable to the Kapoho variety. The Kapoho variety accounted for 16 percent of total acreage compared to 17 percent the previous year. Annual August surveys since year 2000 showed Rainbow and Kapoho as the major two varieties; however, in recent years more Rainbow acreage has been planted.





In 2008, the number of farms totaled 177, down 1 percent from the previous year. Harvested acreage increased 5 percent from 2007 to 1,380 acres.

Majority of papayas were sold fresh, making up 94 percent of the utilization and the remaining 6 percent was processed. Fresh and processed papayas were valued at \$14.4 million, 10 percent above 2007. The all papaya price averaged 43.0 cents per pound, 10 percent more than the previous year.

| Voor |       | Production |           | Utilization    |        | Farm Price |                 |      |         |  |
|------|-------|------------|-----------|----------------|--------|------------|-----------------|------|---------|--|
| Year | Farms | area       | Processed | Fresh Mkt      | All    | Processed  | Fresh Mkt       | All  | sales   |  |
|      |       | Acres      |           | - 1,000 pounds |        | C          | Cents per pound |      | \$1,000 |  |
|      |       |            |           |                |        |            |                 |      |         |  |
| 1946 |       | 360        |           |                | 7,565  |            |                 | 3.2  | 241     |  |
| 1947 |       | 330        |           |                | 5,525  |            |                 | 5.4  | 296     |  |
| 1948 |       | 400        |           |                | 7,100  |            |                 | 4.3  | 303     |  |
| 1949 |       | 360        |           |                | 5,885  |            |                 | 6.0  | 351     |  |
| 1950 |       | 460        |           |                | 6,450  |            |                 | 4.2  | 270     |  |
| 1951 |       | 370        |           |                | 5,740  |            |                 | 4.8  | 273     |  |
| 1952 |       | 320        |           |                | 7,005  |            |                 | 5.7  | 397     |  |
| 1953 |       | 410        |           |                | 9,155  |            |                 | 4.7  | 431     |  |
| 1954 |       | 470        |           |                | 10,785 |            |                 | 5.2  | 556     |  |
| 1955 |       | 410        | 1,259     | 8,076          | 9,335  | 2.0        | 7.1             | 6.4  | 601     |  |
| 1956 |       | 430        | 1,746     | 8,989          | 10,735 | 2.1        | 7.0             | 6.2  | 661     |  |
| 1957 |       | 540        | 1,081     | 13,247         | 14,328 | 3.1        | 5.1             | 5.0  | 714     |  |
| 1958 | 226   | 610        | 1,300     | 13,682         | 14,982 | 2.3        | 5.6             | 5.3  | 797     |  |
| 1959 | 189   | 570        | 1,715     | 12,528         | 14,243 | 2.2        | 5.4             | 5.0  | 714     |  |
| 1960 | 176   | 500        | 1,815     | 10,130         | 11,945 | 2.4        | 6.7             | 6.0  | 719     |  |
| 1961 | 185   | 570        | 1,538     | 13,956         | 15,494 | 2.5        | 5.8             | 5.5  | 849     |  |
| 1962 | 161   | 540        | 738       | 13,472         | 14,210 | 2.5        | 6.0             | 5.8  | 826     |  |
| 1963 | 181   | 460        | 2,350     | 11,725         | 14,075 | 6.0        | 7.8             | 7.5  | 1,053   |  |
| 1964 | 197   | 750        | 4,266     | 17,614         | 21,880 | 5.8        | 4.5             | 4.7  | 1,032   |  |
| 1965 | 200   | 790        | 3,237     | 14,698         | 17,935 | 4.1        | 6.5             | 6.0  | 1,084   |  |
| 1966 | 139   | 600        | 3,455     | 15,225         | 18,680 | 3.7        | 7.9             | 7.1  | 1,334   |  |
| 1967 | 125   | 760        | 3,452     | 19,394         | 22,846 | 4.2        | 8.0             | 7.4  | 1,691   |  |
| 1968 | 120   | 830        | 3,465     | 20,085         | 23,550 | 3.9        | 10.6            | 9.6  | 2,260   |  |
| 1969 | 132   | 850        | 2,898     | 16,337         | 19,235 | 3.6        | 14.0            | 12.4 | 2,385   |  |
| 1970 | 139   | 1,040      | 1,022     | 23,938         | 24,960 | 3.9        | 10.0            | 9.8  | 2,436   |  |
| 1971 | 153   | 970        | 1,553     | 19,172         | 20,725 | 3.3        | 14.0            | 13.2 | 2,736   |  |
| 1972 | 179   | 985        | 3,776     | 21,959         | 25,735 | 2.9        | 15.1            | 13.3 | 3,423   |  |
| 1973 | 176   | 1,430      | 3,976     | 28,848         | 32,824 | 3.5        | 14.0            | 12.7 | 4,180   |  |
| 1974 | 181   | 1,690      | 2,695     | 34,529         | 37,224 | 3.1        | 13.9            | 13.1 | 4,871   |  |
| 1975 | 173   | 1,840      | 4,944     | 34,952         | 39,896 | 3.0        | 15.8            | 14.2 | 5,668   |  |
| 1976 | 178   | 1,930      | 6,449     | 43,588         | 50,037 | 3.8        | 13.5            | 12.3 | 6,134   |  |
| 1977 | 186   | 2,155      | 9,561     | 53,987         | 63,548 | 4.7        | 13.2            | 11.9 | 7,565   |  |
| 1978 | 183   | 2,190      | 9,376     | 54,624         | 64,000 | 4.6        | 14.4            | 13.0 | 8,304   |  |
| 1979 | 194   | 2,210      | 4,569     | 36,446         | 41,015 | 4.0        | 25.6            | 23.2 | 9,515   |  |

#### Papayas: Acreage, utilization, farm price and value, State of Hawaii, 1946-2008

Continued on page 5

| Papayas: Acreage, utilization, farm price and value, State of Hawaii, 1946-2008 Continue |        |                    |           |                |        |                 |            |      | led      |  |
|--|--------|--------------------|-----------|----------------|--------|-----------------|------------|------|----------|--|
| Year   | Farms  | Production         |           | Utilization    |        |                 | Farm Price |      | Value of |  |
| rear   | T anns | area               | Processed | Fresh Mkt      | All    | Processed       | Fresh Mkt  | All  | sales    |  |
|  |        | Acres              |           | - 1,000 pounds |        | Cents per pound |            |      | \$1,000  |  |
|  |        |                    |           |                |        |                 |            |      |          |  |
| 1980   | 197    | 1,950              | 3,556     | 45,360         | 48,916 | 3.4             | 21.7       | 20.4 | 9,964    |  |
| 1981   | 211    | 2,110              | 8,220     | 58,170         | 66,390 | 3.1             | 20.9       | 18.7 | 12,413   |  |
| 1982   | 214    | 2,170              | 7,980     | 44,770         | 52,750 | 3.1             | 25.1       | 21.8 | 11,484   |  |
| 1983   | 227    | 2,120              | 15,100    | 46,300         | 61,400 | 4.4             | 23.6       | 18.9 | 11,591   |  |
| 1984   | 306    | 2,590              | 13,500    | 67,000         | 80,500 | 3.1             | 13.1       | 11.4 | 9,196    |  |
| 1985   | 315    | 2,650              | 11,150    | 49,250         | 60,400 | 2.3             | 16.9       | 14.2 | 8,579    |  |
| 1986   | 311    | 2,355              | 10,900    | 50,100         | 61,000 | 2.3             | 21.7       | 18.2 | 11,123   |  |
| 1987   | 293    | 2,350              | 11,000    | 56,000         | 67,000 | 2.2             | 19.3       | 16.5 | 11,050   |  |
| 1988   | 305    | 2,300              | 12,000    | 57,000         | 69,000 | 3.2             | 21.0       | 17.9 | 12,354   |  |
| 1989   | 325    | 2,500              | 10,000    | 64,000         | 74,000 | 3.0             | 22.0       | 19.4 | 14,380   |  |
| 1990   | 311    | 2,400              | 10,500    | 58,000         | 68,500 | 2.9             | 25.0       | 21.6 | 14,805   |  |
| 1991   | 271    | 2,025              | 7,200     | 48,150         | 55,350 | 2.7             | 33.3       | 29.3 | 16,228   |  |
| 1992   | 259    | 2,415              | 15,500    | 55,800         | 71,300 | 3.0             | 25.0       | 20.2 | 14,415   |  |
| 1993   | 256    | 2,555              | 5,500     | 58,200         | 63,700 | 3.1             | 23.2       | 21.5 | 13,673   |  |
| 1994   | 256    | 2,200              | 5,800     | 56,200         | 62,000 | 3.0             | 24.3       | 22.3 | 13,831   |  |
| 1995   | 244    | 2,435              | 8,900     | 41,900         | 50,800 | 3.0             | 43.5       | 36.4 | 18,494   |  |
| 1996   | 281    | 1,835              | 4,000     | 37,800         | 41,800 | 3.0             | 44.8       | 40.8 | 17,054   |  |
| 1997   | 241    | 1,985              | 3,100     | 35,700         | 38,800 | 3.0             | 52.9       | 48.9 | 18,978   |  |
| 1998   | 262    | 2,120              | 4,300     | 35,600         | 39,900 | 3.0             | 35.0       | 31.6 | 12,589   |  |
| 1999   | 222    | 1,940              | 3,000     | 39,400         | 42,400 | 3.0             | 40.2       | 37.6 | 15,929   |  |
| 2000   | 236    | 1,650              | 4,250     | 50,250         | 54,500 | 3.0             | 31.6       | 29.4 | 16,007   |  |
| 2001   | 221    | 1,950              | 3,000     | 52,000         | 55,000 | 3.0             | 27.9       | 26.5 | 14,598   |  |
| 2002   | 164    | 1,720              | 3,200     | 42,700         | 45,900 | 3.0             | 27.7       | 26.0 | 11,924   |  |
| 2003   | 163    | 1,565              | 1,800     | 40,800         | 42,600 | 3.0             | 31.9       | 30.7 | 13,069   |  |
| 2004   | 207    | <sup>1</sup> 1,265 | 1,700     | 34,100         | 35,800 | 3.0             | 36.1       | 34.5 | 12,361   |  |
| 2005   | 207    | 1,480              | 2,200     | 30,700         | 32,900 | 3.0             | 36.4       | 34.2 | 11,241   |  |
| 2006   | 170    | 1,530              | 2,100     | 26,600         | 28,700 | 3.0             | 41.3       | 38.5 | 11,049   |  |
| 2007   | 178    | 1,310              | 2,200     | 31,200         | 33,400 | 3.8             | 41.7       | 39.2 | 13,094   |  |
| 2008   | 177    | 1,380              | 2,000     | 31,500         | 33,500 | 3.0             | 45.5       | 43.0 | 14,393   |  |

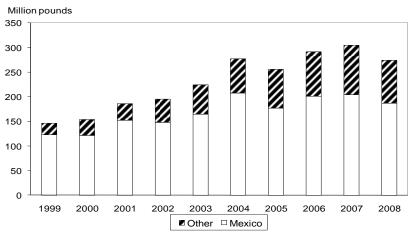
Papayas: Acreage, utilization, farm price and value, State of Hawaii, 1946-2008 -- Continued

<sup>1</sup> Revised.

#### **U.S. Papaya Imports Lower**

Fresh papaya imports from foreign sources into the United States totaled 274.2 million pounds in 2008, down 10 percent from the previous year, according to the Department of Commerce. Mexico accounted for 187.2 million pounds or 68 percent of the total. Imports from Belize have contributed 23 percent of the total imports in 2008.

imports by type for 2008 Total decreased 9 percent from 2007 to 292.8 million pounds due to less fresh papayas. Fresh imports continued to account for the majority or 94 percent of total imports.



#### U.S. Imports of fresh papaya, by country, 2004-2008

|                    |       |                | <i>, ., ., .,,</i> ,, _, _ |       |       |  |  |  |  |  |
|--------------------|-------|----------------|----------------------------|-------|-------|--|--|--|--|--|
| Country            | 2004  | 2005           | 2006                       | 2007  | 2008  |  |  |  |  |  |
|                    |       | Million pounds |                            |       |       |  |  |  |  |  |
| Mexico             | 207.7 | 176.8          | 201.0                      | 204.2 | 187.2 |  |  |  |  |  |
| Belize             | 53.4  | 61.1           | 74.7                       | 73.8  | 62.1  |  |  |  |  |  |
| Brazil             | 10.7  | 10.1           | 8.1                        | 9.2   | 8.4   |  |  |  |  |  |
| Jamaica            | 2.2   | 2.3            | 2.9                        | 2.2   | 2.4   |  |  |  |  |  |
| Dominican Republic | 2.6   | 2.4            | 2.2                        | 11.3  | 4.7   |  |  |  |  |  |
| Guatemala          | .9    | 2.7            | 2.2                        | 3.4   | 8.2   |  |  |  |  |  |
| Other              | .3    | .5             | .3                         | .4    | 1.2   |  |  |  |  |  |
| Total              | 277.8 | 255.9          | 291.4                      | 304.5 | 274.2 |  |  |  |  |  |

\* = Less than 100,000 pounds.

Source: U.S. Department of Commerce, Bureau of the Census.

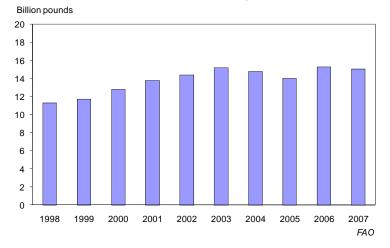
| U.S. Imports of papaya, by type, 2004-2008 |       |                |       |       |       |  |  |  |  |  |  |  |
|--|-------|----------------|-------|-------|-------|--|--|--|--|--|--|--|
| Туре                                       | 2004  | 2005           | 2006  | 2007  | 2008  |  |  |  |  |  |  |  |
|  |       | Million pounds |       |       |       |  |  |  |  |  |  |  |
| Fresh                                      | 277.8 | 255.9          | 291.4 | 304.5 | 274.2 |  |  |  |  |  |  |  |
| Frozen                                     | 2.1   | 2.7            | 2.7   | 2.2   | 3.7   |  |  |  |  |  |  |  |
| Dried                                      | 3.9   | 4.0            | 3.3   | 4.8   | 4.4   |  |  |  |  |  |  |  |
| Paste & Puree                              | .1    | .8             | .5    | .4    | .8    |  |  |  |  |  |  |  |
| Pulp                                       | 1.2   | 1.1            | 1.4   | 1.5   | 1.4   |  |  |  |  |  |  |  |
| Other                                      | 7.1   | 7.4            | 9.4   | 7.9   | 8.4   |  |  |  |  |  |  |  |
| Total <sup>1</sup>                         | 292.3 | 271.8          | 308.6 | 321.3 | 292.8 |  |  |  |  |  |  |  |

<sup>1</sup> Total may not add due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census.

#### WORLD PAPAYA PRODUCTION, 1998-2007

Information for 2008 was not available at the time of printing.



# World papaya production, by country, 2004-2008<sup>1</sup>

| Country                           | 2004               | 2005                | 2006                | 2007   | 2008 |
|-----------------------------------|--------------------|---------------------|---------------------|--------|------|
|                                   |                    |                     | Million pounds      |        |      |
| Brazil                            | 3,555              | 3,470               | 4,184               | 3,994  | N.A. |
| Colombia                          | 226                | 303                 | <sup>2</sup> 360    | 457    | N.A. |
| Congo, Dem Republic of            | 472                | 476                 | 480                 | 485    | N.A. |
| Ethiopia                          | 573                | 573                 | <sup>2</sup> 573    | 573    | N.A. |
| India                             | 1,543              | 1,543               | 1,543               | 1,543  | N.A. |
| Indonesia                         | 1,615              | 1,210               | 1,419               | 1,370  | N.A. |
| Mexico                            | 1,736              | 1,564               | 1,761               | 2,027  | N.A. |
| Nigeria                           | 1,664              | 1,666               | 1,673               | 1,687  | N.A. |
| Peru                              | 428                | 377                 | <sup>2</sup> 387    | 348    | N.A. |
| Philippines                       | 295                | 323                 | <sup>2</sup> 346    | 362    | N.A. |
| Thailand                          | 276                | 289                 | 289                 | 289    | N.A. |
| USA                               | 36                 | 33                  | 28                  | 33     | N.A. |
| Venezuela, Bolivarian Republic of | 290                | 260                 | 334                 | 291    | N.A. |
| Other                             | <sup>2</sup> 2,057 | <sup>2</sup> 2,350  | <sup>2</sup> 2,340  | 2,431  | N.A. |
| Total <sup>3</sup>                | 14,769             | <sup>2</sup> 14,441 | <sup>2</sup> 15,716 | 15,890 | N.A. |

N.A. = Not available. <sup>1</sup> Data quality can be official, semi-official, estimates, or calculated.

<sup>2</sup> Revised.

<sup>3</sup> Total may not add due to rounding. Source: Food and Agriculture Organization (FAO), FAOSTAT data, <u>http://faostat.fao.org/site/291/default.aspx</u> accessed on 9/9/2009

MARK E. HUDSON Director

KING J. WHETSTONE Deputy Director

REGINA W. HIDANO Agricultural Statistician

SANDY K. NAKASONE Statistical Assistant Contributions by:

NAOMI LANDGRAF Maui County

DAVID MATTICE & SARA KAMIBAYASHI Hawaii County

> JUNE OKAMURA Honolulu County & Kauai County

> > NASDA Enumerators