ACREAGE INVENTORY SUMMARY 2011 UPDATE USING REMOTE SENSING TECHNOLOGY



The California Avocado Commission's crop estimating team in conjunction with GeoSpatial Partners, LLC uses the latest in remote sensing techniques to assess avocado acreage in production. As technology continues to advance refinements in our third generation of remote sensing techniques were applied to satellite imagery collected in May 2011. The imagery processing techniques include; segmentation into homogenous polygons, retention of tree crop polygons, calculation of average crop canopy moisture and vegetation indices, analysis of change maps from previous inventories, and classification of avocado groves into four categories; producing, topped/stumped, new/young, and abandoned. Aerial imagery (for a real-world view), and satellite imagery (for spectral and temporal data) are integrated into previously classified avocado acreage and analyzed for current condition for five primary avocado growing counties; San Diego, Riverside, Ventura, Santa Barbara, and San Luis Obispo. Other minor counties acreage is estimated based on ancillary data from county agricultural commissioners and our grower community. The results of the avocado acreage inventory including the CAC crop team application of varietal break down are:

2011 Avocado Acreage Inventory			
	Producing	Topped/ Stumped	New (Young)
County	Acres	Acres	Acres
San Diego	17,380	5,039	565
Riverside	6,386	863	461
Ventura	16,252	838	1,460
Santa Barbara	5,771	891	423
San Luis Obispo	4,044	204	303
Minor Counties*	1,961		
Total	51,794	7,835	3,212

Estimated by Variety		
Variety	Bearing Acres*	
Hass	56,548	
Lamb-Hass	1,964	
Other	1,117	
Total	59,629	
*Includes producing + topped/stumpted acres		



