

DACUM Chart for Greenhouse Grower

DACUM Panel

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Duties		← Tasks				
A	Coordinate Greenhouse Activities	A-1 Orient new grower staff	A-2 Conduct on-the-job training	A-3 Schedule work time for grower staff	A-4 Supervise grower staff	A-5 Verify achievement of quality control standards
B	Perform Sanitation Procedures	B-1 Sanitize greenhouse surfaces	B-2 Sanitize greenhouse equipment & tools	B-3 Sanitize greenhouse supplies	B-4 Supervise personnel sanitation	B-5 Inspect incoming/suspect materials
C	Implement Crop Schedule	C-1 Prepare crop space	C-2 Grow liners from seed	C-3 Grow liners from cuttings	C-4 Grow liners from divisions	C-5 Transplant liners
D	Control Plant Culture	D-1 Collect water samples	D-2 Test water samples	D-3 Interpret water samples	D-4 Collect media samples	D-5 Test media samples
E	Manage Media Moisture Level	E-1 Calibrate watering equipment	E-2 Determine water holding capacity of media	E-3 Determine water needs of crop	E-4 Inject needed plant supplements	E-5 Apply water as determined
F	Maintain Greenhouse Environment	F-1 Determine need for temperature adjustment	F-2 Adjust greenhouse temperature	F-3 Determine need for light duration adjustment	F-4 Adjust greenhouse light duration	F-5 Determine need for light quality adjustment
G	Prepare IPM Program (e.g., weed disease, insects, rodents)	G-1 Scout growing area	G-2 Determine need for pest control	G-3 Determine type of pest control	G-4 Utilize cultural control	G-5 Apply biological control
H	Maintain Grower Records	H-1 Complete crop reports (e.g., water, fertilizer, PGR, chemical, application)		H-2 Update training records	H-3 Update EPA spray log	H-4 Record greenhouse scouting data
I	Participate in Greenhouse Trials	I-1 Set up plant trials	I-2 Implement plant trials	I-3 Set up equipment trials	I-4 Implement equipment trials	I-5 Set up new procedure trials
J	Participate in Continuing Education	J-1 Obtain/renew pesticide license	J-2 Attend horticulture seminars, conferences, tradeshows		J-3 Review horticultural literature	J-4 Attend field trip/tours

A-6 Coordinate greenhouse maintenance	A-7 Restock grower supplies	A-8 Execute emergency response plans				
B-6 Isolate incoming/suspect materials	B-7 Remove unnecessary plant material (e.g., weeds or diseased plants)					
C-6 Monitor crops according to schedule	C-7 Apply PGRs	C-8 Pinch the schedule crop	C-9 Space the scheduled crop	C-10 Finish the scheduled crop		
D-6 Interpret media samples	D-7 Collect tissue samples	D-8 Test tissue samples	D-9 Interpret tissue samples	D-10 Adjust pH &/or nutrition		
F-6 Adjust greenhouse light quality	F-7 Determine need for humidity adjustment	F-8 Adjust greenhouse humidity	F-9 Determine need for air movement adjustment	F-10 Adjust greenhouse air movement	F-11 Determine need for CO ₂ adjustment	F-12 Adjust greenhouse CO ₂
G-6 Apply chemical control	G-7 Monitor efficacy of control					
H-5 Record greenhouse growing environment conditions (e.g., weather)		H-6 Update maintenance records (e.g., equipment structures)				
I-6 Implement procedures trial	I-7 Record trial results (e.g., plant, equipment, procedures)		I-8 Report trial results			
J-5 Participate in staff meetings						

General Knowledge and Skills

Plant culture	Plant species & cultivars
Plant physiology	Basic computer skills
Math skills	Emergency procedures
Entomology	Use of greenhouse equipment & procedures
Pathology	Organizational skills
Plant nutrients	Safe & effective use of chemicals
Interpersonal skills	Problem solving skills
Water testing	Communication skills
pH testing	Root media characteristics
Media testing	OSHA regulations
WPS	Marketing
MSDS	Communicate effectively
Team skills	

Worker Behaviors

Punctual	Proactive
Reliable	Positive
Self-motivated	Creative
Detail-oriented	Flexible
Task oriented	Independent
Dependable	Persuasive
Team player	Decisive
Honest	Tolerant of stress
Responsible	Attentive
Loyal	Knowledgeable
Safety-oriented	

Tools, Equipment, Supplies and Materials

pH meter	Computer
Ec meter	Hand tools
Fertilizer injector	Growing media
Irrigation equipment	Containers
Environmental control equipment	Scalpel
Decontamination kit	Greenhouse structures
PPE	Light meter
Spray equipment	Carts
MSDS	Thermometers
Transplanters	Sensors
Pruners	Alarm systems
Measuring equipment	Reference material
Microscope	First aid kit
Magnifying equipment	

Future Trends and Concerns

Globalizing
Chemicals
Changing market place
Automation
Greater government oversight
Wages
Language/culture
Staff difficult to find
Increasing competition
Change in plant material
Increased number of plant varieties available
Environmental concerns
Shrinking margins

Acronyms

IPM =	Integrated Pest Management
PGR =	Plant Growth Regulator
WPS =	Worker Protection Standards
MSDS =	Materials Safety Data Sheet
PPE =	Personal Protective Equipment
OSHA =	Occupational Safety & Health Administration
CO ₂ =	Carbon Dioxide
EPA =	Environmental Protection Agency