Color Photo Guide to DRY BEAN PESTS

A Supplement to the UC IPM Pest Management Guidelines

INSECTS and MITES_____



Seedcorn maggot, *Delia platura;* larva and damage to seeds



Variegated cutworm, *Peridroma* saucia; larva



Sugarbeet wireworm, Limonius californicus



Spider mites, *Tetranychus* spp.; adults and eggs



Spider mite damage to leaves



Cowpea aphid, *Aphis craccivora;* nymph (right) and adult (left)



Cowpea aphid colony on blackeyes; note leaf curl symptoms.



Potato leafhopper, Empoasca fabae



Corn earworms, *Helicoverpa zea;* variation in color of the larvae



Beet armyworm, *Spodoptera exigua*; larva



Western yellowstriped armyworm, Spodoptera praefica; larva



Western flower thrips, Frankliniella occidentalis; adult



Thrips damage to seedling



Leafminer, *Liriomyza* spp.; mines and larva



Silverleaf whitefly, *Bemisia* argentifolii; nymphs and adult



Cabbage looper, Trichoplusia ni



Saltmarsh caterpillar, *Estigmene* acrea



Lygus bug, Lygus hesperus; adult



Lygus bug damage to buds and flowers



Lygus bug damage to developing seeds



Lygus bug "sting" damage to mature seeds



Redshouldered stink bug, *Thyanta pallidovirens;* adult



Cowpea weevil, *Callosobruchus maculatus;* adult and damage to blackeye beans in storage



Minute pirate bug, *Orius* tristicolor



Western predatory mite, Galendromus (Metaseiulus) occidentalis

DISEASES



Rhizoctonia, *Rhizoctonia solani;* seedling damage



Rhizoctonia; lesion on belowground portion of stem



Damping off, *Pythium* spp.; early lesion on seedling



White mold, *Sclerotinia sclerotiorum*; symptoms on garbanzo



White mold; mycelium and sclerotia



White mold; pod symptoms on common bean



Fusarium root rot, *Fusarium solani;* note initiation of new roots above red lesion on underground portion of stem



Fusarium wilt, Fusarium oxysporum; vascular discoloration on stem on bottom



Fusarium wilt; leaf yellowing on blackeyes



Charcoal rot, *Macrophomina* phaseolina; stem symptoms



Curly top, beet curly top geminivirus; leaf crinkling on stunted plant



Southern blight, *Sclerotium rolfsii;* mycelium and sclerotia on underground portion of stem

Photo by B. McCiellan



Common bacterial blight, Xanthomonas campestris pv. phaseoli; leaf symptoms



Common bacterial blight; symptoms on pods



Halo blight, *Pseudomonas syringae* pv. *phaseolicoli;* leaf symptoms



Halo blight; symptoms on pods



Anthracnose, *Colletotrichum lindemuthianum;* symptoms on pods



Ascochyta blight, *Ascochyta rabiei;* leaf symptoms on garbanzo



Ascochyta blight; symptoms on pod



Bean yellow mosaic; leaf symptoms



Bean common mosaic; leaf symptoms

R. Gilbertsor

Photo by

Nematodes



Root knot nematode, Meloidogyne incognita; root galling

Root knot nematode gall (top) in comparison to root nodule from nitrogen-fixing bacteria



UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES PUBLICATION 3339PS2

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UC IPM Pest Management Guidelines are available from UC Cooperative Extension county offices or from Communication Services, DANR. Produced by IPM Education and Publications, University of California, Davis, CA 95616-8620. This publication was a project of the UC DANR Dry Bean Workgroup. All photos taken by Jack Kelly Clark unless otherwise noted.

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