Rice ragged stunt virus (RRSV), first described in 1977, is now prevalent in South and Southeast Asia. Symptoms are similar to those of rice black-streaked dwarf virus (RBSDV), which occurs in China, Japan, and Korea. Eishiro Shikata and associates of Hokkaido University, Sapporo, Japan, working with K. C. Ling and associates of the International Rice Research Institute, Los Baños, Philippines, showed that both viruses are transmitted in a persistent manner by planthoppers but by different species—RRSV by *Nilaparvata lugens* and RBSDV by *Laodelphax striatellus*. Moreover, barley, wheat, oats, and maize are hosts for RBSDV but not for RRSV. Purified isometric particles of RRSV are 36–40 nm in diameter and those of RBSDV, 60 nm. The authors suggest that RRSV is a new plant reovirus. (Ann. Phytopathol. Soc. Jpn. 45:436-443)

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Strains of tobacco mosaic virus (TMV) vary greatly in ability to penetrate seeds during systemic infection of tomato, according to A. Th. B. Rast, Netherlands. Tomato enation strain NH-69 and tomato strain SPS were most capable of infecting seed, whereas yellow mosaic strain GPga and crusty fruit strain MKv had a low seed infection rate in spite of causing severe symptoms on fruit. Tobacco strain MH and symptomless mutant strain MII-16 were hardly detectable in seed. When present in tomato, MII-16 interferes with multiplication of other strains and has been used in some areas to cross protect tomato plants against TMV. The author concludes that MII-16 may be used to increase production of relatively virus-free seed, provided only symptomless plants are used, the seed is checked regularly for TMV, and heat treatment of seed is used when necessary. (Neth. J. Plant Pathol. 85:223-233)

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Soils identified as highly suppressive to Fusarium wilt of muskmelon (*F. oxysporum* f. sp. *melonis*) are being studied by F. Rouxel, C. Alabouvette, and J. Louvet in France. Treatment of the soil with moist heat (55 C) for 30 min eliminated suppressiveness. Of numerous fungi reestablished after heat treatment, saprophytic *F. oxysporum* alone or combined with other fungi restored suppressiveness almost completely. Isolates of *F. oxysporum* and, to some extent, of *F. solani*, whether alien or indigenous to the soil, restored suppressiveness to heat-treated suppressive soil. The same isolates of *F. oxysporum* added to heat-treated conducive soil, on the other hand, did not provide suppressiveness. The investigators conclude that both soil medium and *Fusarium* species are important components of soils suppressive to Fusarium wilt of muskmelon. (Ann. Phytopathol. 11:199-207)

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Field control of take-all (*Gaeumannomyces graminis* var. *tritici*) was obtained by P. T. W. Wong and R. J. Southwell in New South Wales, Australia, by introducing avirulent *G. graminis* var. *graminis* and a *Phialophora* sp. simultaneously with the take-all pathogen at sowing time. Yields of "cross-protected" wheat approached those of healthy wheat when take-all was slight to moderate; control was less significant when take-all was severe. Trials were successful in four seasons: 1974, 1975, 1976, and 1977. A field survey revealed that the avirulent fungi are generally lacking in wheat fields in New South Wales and would have to be introduced for take-all control. (Ann. Appl. Biol. 94:41-49)

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Resistance to acute oral dosages (2.5 or 3.0 mg/kg of body weight) of aflatoxin (90% B_1, 8.6% G_1, 1.1% B_2, and 0.2% B_2) was obtained after five generations of selection from progeny of Japanese quail. The base generation consisted of 250 random-bred quail given 3.0 mg of aflatoxin per kilogram of body weight; the survivors were used to produce progeny for the next generation. After a single generation of selection, the difference in mortality of the selected and control lines was twofold; by the fifth generation, the difference was eightfold to 11-fold. Separate tests indicated the resistance was genetic and not from extranuclear factors passed through the eggs, report H. L. Narks and R. D. Wyatt. They suggest that the quail lines offer a means to study the physiological basis of resistance to aflatoxin and may provide new insights on ways to solve the aflatoxin problem. (Science 206: 1329-1330)

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An electrically sterilized transfer loop described by R. C. Blanchard and G. C. Saufley can be made for about $25. The entire length of the loop is heated to red-hot in 4 sec. A foot switch controls the electric current, so the user's hands are free to perform other culture transfer operations. A complete list of components and instructions for assembly are given. (Mycologia 71:1240-1243)

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Alfalfa mosaic virus (AMV) infection reduces winter survival of the host plant. According to J. C. Tu and T. M. Holmes of Alberta, Canada, the main reason is that nodulation and, consequently, food storage in the plant is decreased by AMV infection. The investigators worked with 12 cultivars and concluded that genetic factors responsible for winter hardiness are more important than AMV infection, since cultivar differences had a greater effect. (Phytopathol. Z. 97:1-9)

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At the second instar, corn earworm, fall army worm, and European corn borer weighed less when fed diets containing aflatoxin B_1 or G_1 at 0.25 or 2.5 mg/10 ml of diet. Corn earworm seemed more sensitive than the other two insects. Aflatoxin had no apparent effect on viability of eggs from treated insects. W. W. McMillian, D. M. Wilson, N. W. Widstrom, and W. D. Perkins suggest that natural populations of these insects may have been low during certain years because larvae fed on contaminated grain. (Econ. Entomol. 73:26-28)

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An alfalfa plant designated MnPL-480 was unable to fix N_2 when grown with any of five strains of *Rhizobium meliloti*, report D. R. Viands, C. P. Vance, G. H. Heichel, and D. K. Barnes. Nodules on MnPL-480 were abnormally large and had white interiors, and only a few cells contained bacteroids. Progenies from self-pollinated MnPL-480 plants produced only ineffective nodules, but F_1 progenies from crosses of MnPL-480 with a normal plant produced functional nodules. The character apparently is a heritable, recessive, host-conditioned trait. MnPL-480 plants may be useful for studying nitrogen fixation in alfalfa. (Crop Sci. 19:905-908)

Recent reports from fields related to plant pathology for inclusion in *Scientific News* may be sent to R. James Cook, 367 Johnson Hall, Washington State University, Pullman, WA 99164.