Slippery cabbage (Abelmoschus manihot), is known in the Solomon Islands as sliperi kabis, reko, and neka. It is a bush cultivated primarily for its leaves which give a slippery feel when being washed. Cooked leaves have a slippery texture too. It is the most popular vegetable in the Solomon Islands for many reasons. The leaves have a high level of protein, vitamins, iron, potassium, magnesium, calcium, and fiber. They are cooked in a variety of ways or eaten as salad. The crop is grown using stem cuttings, needs very little care, produces harvestable leaves as early as two months after planting, and remains productive for 1-2 years. Slippery cabbage is sold at local markets. Genetic variability has been observed for leaf size, shape, and texture, and anthocyanin coloration of the stem and leaves. Because it is propagated asexually, local people do not pay attention to its flowering behavior or its potential to be propagated by seeds. Reproductive biology of slippery cabbage needs to be studied in order to conserve it using seeds. Slippery cabbage is not a crucifer; it is in the okra family (Malvaceae).

Source: Edwin Javier, Global Technology Dissemination, AVRDC-The World Vegetable Center; Ravindra C. Joshi, AVRDC-The World Vegetable Center, Project Office, Solomon Islands

Photos: Greg Luther

Top: Bundled young shoots of slippery cabbage in the Auki market. 
Below: Field production of slippery cabbage in the Solomon Islands
A recent study found that training is a key factor in improving farmers’ post-harvest practices, resulting in improvement of rural livelihoods and positive effects on the development of rural economies.

According to a recent evaluation by AVRDC-The World Vegetable Center, 60% of respondents in Vietnam, 40% in Lao PDR and 27% in Cambodia are still using one or more of the technologies disseminated in the training under the ADB-funded RETA 6208 postharvest project after two years. This project produced a wide variety of low-cost postharvest technologies on fresh produce handling and processing techniques (drying and sauce preparations). These technologies were disseminated to target communities in late 2006 and early 2007 through various training activities.

The results also show that impact on farm profits is large. Around 71% of the adopters reported that their farm profits increased as a result of higher prices, price differentiation for products of different grades, and increased volume of sales.

Mr. Tat Sopho, a farmer from S’ang District, Kandal Province, Cambodia, joined the training in February 2007. He received higher prices by selling tomato fruits with calyces (1,000 Riel/kg) than without calyces (800 Riel/kg). Moreover, he managed to get different prices for different grades of tomatoes: Grade 1: 1,500 Riel/kg; Grade 2: 1,200 Riel/kg and Grade 3: 800 Riel/kg. He believes that he achieved better sales. Sopho now carefully cuts his tomatoes to include their calyces and does sorting and grading.

Ms. Khoune, a farmer from Hadxayfong District, Vientiane, Lao PDR, now cleans and sorts chili before sun drying after attending the mobile training in January 2007. She said in the beginning she only wanted to try out the techniques since she has her own way of drying chili. However, after using the drying techniques from the training, she found out her dried chilies are of better quality and fetch a good price.

“I used to sell chili for 15,000 KIP/kg, but now I sell it for 20,000 KIP/kg. My dried chili is always in demand and I can store it longer, even up to one year,” said Ms. Khoune.

“More money has come in and I was able to buy more rice straw, fertilizer and a generator for my electric pump,” remarked Mr. Tat Sopho.
New virus disease of eggplant in Indonesia

A pepper-infecting begomovirus infected eggplant and has been observed in Java, Indonesia. AVRDC Virology Unit has identified this virus as belonging to Tomato yellow leaf curl Kanchanaburi virus. A study regarding the distribution and incidence of this new virus is in progress.

Source: Nurul H., East-West Seed Company, Indonesia, Crop Breeding; Wen-shi Tsai, AVRDC - The World Vegetable Center, Virology Unit;

Photo: Nurul H.

Parasitic weed threatening jute mallow production in Nigeria

Dodder (Cuscuta sp.), belonging to the Convolvulaceae family, also named “devil’s hair”, is a parasitic weed that attacks a wide range of plant species. It is called gede-gede in Nigeria. This weed attaches to the stem of jute mallow (Corchorus olitorius) and produces abundant yellow vines, which cover the canopy of this indigenous vegetable and cause yield and quality reduction.

Control measures: plant a non-host crop for several years after an infestation; pull up infested host crops immediately, particularly before the dodder produces seed; and use preemergent herbicides. Non-host crops include grasses and many other monocotyledons. If dodder is found before it chokes a host plant, it may be simply removed from the soil. If choking has begun, the host plant must be pruned significantly lower than the dodder, as dodder is versatile and can grow back if haustoria are present.

Source and photo: Christophe Kouamé, vBSS Project Office, Cameroon; http://en.wikipedia.org/wiki/Cuscuta

Promotion of vegetable production in Rwanda

A joint effort of AVRDC-IMBARAGA (a farmers’ federation in Kinyarwanda, Rwanda) and ISAR (Rwanda Agronomic Research Institute) on promoting improved vegetable production technologies was enthusiastically received by the farmers.

Many farmers have already harvested the seeds from the aforementioned demonstration trials and initiated new vegetable plantings in their respective gardens.

Source and photos: Rémi Nono-Womdim, vBSS Project Office, Tanzania

New virus disease of eggplant in Indonesia

A pepper-infecting begomovirus infected eggplant and has been observed in Java, Indonesia. AVRDC Virology Unit has identified this virus as belonging to Tomato yellow leaf curl Kanchanaburi virus. A study regarding the distribution and incidence of this new virus is in progress.

Source: Nurul H., East-West Seed Company, Indonesia, Crop Breeding; Wen-shi Tsai, AVRDC - The World Vegetable Center, Virology Unit;

Photo: Nurul H.

Parasitic weed threatening jute mallow production in Nigeria

Dodder (Cuscuta sp.), belonging to the Convolvulaceae family, also named “devil’s hair”, is a parasitic weed that attacks a wide range of plant species. It is called gede-gede in Nigeria. This weed attaches to the stem of jute mallow (Corchorus olitorius) and produces abundant yellow vines, which cover the canopy of this indigenous vegetable and cause yield and quality reduction.

Control measures: plant a non-host crop for several years after an infestation; pull up infested host crops immediately, particularly before the dodder produces seed; and use preemergent herbicides. Non-host crops include grasses and many other monocotyledons. If dodder is found before it chokes a host plant, it may be simply removed from the soil. If choking has begun, the host plant must be pruned significantly lower than the dodder, as dodder is versatile and can grow back if haustoria are present.

Source and photo: Christophe Kouamé, vBSS Project Office, Cameroon; http://en.wikipedia.org/wiki/Cuscuta

Promotion of vegetable production in Rwanda

A joint effort of AVRDC-IMBARAGA (a farmers’ federation in Kinyarwanda, Rwanda) and ISAR (Rwanda Agronomic Research Institute) on promoting improved vegetable production technologies was enthusiastically received by the farmers.

Many farmers have already harvested the seeds from the aforementioned demonstration trials and initiated new vegetable plantings in their respective gardens.

Source and photos: Rémi Nono-Womdim, vBSS Project Office, Tanzania

New virus disease of eggplant in Indonesia

A pepper-infecting begomovirus infected eggplant and has been observed in Java, Indonesia. AVRDC Virology Unit has identified this virus as belonging to Tomato yellow leaf curl Kanchanaburi virus. A study regarding the distribution and incidence of this new virus is in progress.

Source: Nurul H., East-West Seed Company, Indonesia, Crop Breeding; Wen-shi Tsai, AVRDC - The World Vegetable Center, Virology Unit;

Photo: Nurul H.

Parasitic weed threatening jute mallow production in Nigeria

Dodder (Cuscuta sp.), belonging to the Convolvulaceae family, also named “devil’s hair”, is a parasitic weed that attacks a wide range of plant species. It is called gede-gede in Nigeria. This weed attaches to the stem of jute mallow (Corchorus olitorius) and produces abundant yellow vines, which cover the canopy of this indigenous vegetable and cause yield and quality reduction.

Control measures: plant a non-host crop for several years after an infestation; pull up infested host crops immediately, particularly before the dodder produces seed; and use preemergent herbicides. Non-host crops include grasses and many other monocotyledons. If dodder is found before it chokes a host plant, it may be simply removed from the soil. If choking has begun, the host plant must be pruned significantly lower than the dodder, as dodder is versatile and can grow back if haustoria are present.

Source and photo: Christophe Kouamé, vBSS Project Office, Cameroon; http://en.wikipedia.org/wiki/Cuscuta

Promotion of vegetable production in Rwanda

A joint effort of AVRDC-IMBARAGA (a farmers’ federation in Kinyarwanda, Rwanda) and ISAR (Rwanda Agronomic Research Institute) on promoting improved vegetable production technologies was enthusiastically received by the farmers.

Many farmers have already harvested the seeds from the aforementioned demonstration trials and initiated new vegetable plantings in their respective gardens.

Source and photos: Rémi Nono-Womdim, vBSS Project Office, Tanzania

New virus disease of eggplant in Indonesia

A pepper-infecting begomovirus infected eggplant and has been observed in Java, Indonesia. AVRDC Virology Unit has identified this virus as belonging to Tomato yellow leaf curl Kanchanaburi virus. A study regarding the distribution and incidence of this new virus is in progress.

Source: Nurul H., East-West Seed Company, Indonesia, Crop Breeding; Wen-shi Tsai, AVRDC - The World Vegetable Center, Virology Unit;

Photo: Nurul H.

Parasitic weed threatening jute mallow production in Nigeria

Dodder (Cuscuta sp.), belonging to the Convolvulaceae family, also named “devil’s hair”, is a parasitic weed that attacks a wide range of plant species. It is called gede-gede in Nigeria. This weed attaches to the stem of jute mallow (Corchorus olitorius) and produces abundant yellow vines, which cover the canopy of this indigenous vegetable and cause yield and quality reduction.

Control measures: plant a non-host crop for several years after an infestation; pull up infested host crops immediately, particularly before the dodder produces seed; and use preemergent herbicides. Non-host crops include grasses and many other monocotyledons. If dodder is found before it chokes a host plant, it may be simply removed from the soil. If choking has begun, the host plant must be pruned significantly lower than the dodder, as dodder is versatile and can grow back if haustoria are present.

Source and photo: Christophe Kouamé, vBSS Project Office, Cameroon; http://en.wikipedia.org/wiki/Cuscuta

Promotion of vegetable production in Rwanda

A joint effort of AVRDC-IMBARAGA (a farmers’ federation in Kinyarwanda, Rwanda) and ISAR (Rwanda Agronomic Research Institute) on promoting improved vegetable production technologies was enthusiastically received by the farmers.

Many farmers have already harvested the seeds from the aforementioned demonstration trials and initiated new vegetable plantings in their respective gardens.

Source and photos: Rémi Nono-Womdim, vBSS Project Office, Tanzania
Feedback from our readers

The above photo in the first issue of Feedback from the Field stimulated the following dialogue:

Deng-lin Wu from Crop and Ecosystem Management commented that the tomato leaves look so green and healthy in this picture, and in particular with no sign of insect damage. The leaf curl symptom looks similar to the heat-tolerant tomato’s physiological response which often occurs under high temperature conditions (> 28º C); it shows the same symptom as AVRDC heat tolerant F1 lines FMTT22 and FMTT847 which were popular during 1985-1990. “I presume this leaf curl symptom has no correlation with disease and pest damage.”

Ravindra C. Joshi from the project office in the Solomon Islands reported that the photo is of tomato accession number CLN1621E. This accession has severe leaf curling compared to other AVRDC tomato lines/accessions such as CLN 2585D, WVCT-1, WVCT-2, WVCT-6, and CLN1558B. Joshi, an entomologist, noted that thrips and whiteflies are dominant herbivores on all tomato lines/accessions the project grows in Honiara, Solomon Islands.

Peter Hanson from Tomato Breeding responded that CLN1621E is one of the most heat tolerant lines. CLN1621E and other heat tolerant lines sometimes show curled leaves, which may be a physiological response to high temperatures. “I cannot rule out insect-induced curling since I did not examine the leaves.”

Srinivasan Ramasamy from Entomology has examined the leaf samples from Solomon Islands and said that the possible thrips species could be Scirtothrips dorsalis, which has been reported to occur in Solomon Islands, Papua New Guinea and Queensland (Australia).

GTD’s conclusions: Tomato leaf curl in this case was likely caused by multiple factors, given the commonly high temperatures in the Solomon Islands and the presence of thrips and whiteflies. Viral infestation is another possible cause.