Registration of ‘NGVU-05-24’ Cowpea

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‘NGVU-05-24’ cowpea [Vigna unguiculata (L.) Walp.] (Reg. No. CV-272, PI 642157), originally tested as IT93K-452-1 was developed by the International Institute of Tropical Agriculture (IITA) and distributed to various national programs in 1995 as a part of the early maturing cowpea international trial for evaluation and selection of suitable cultivars adapted to local conditions. The Nigerian Nationally Coordinated Cowpea Research Project tested IT93K-452-1 in the early maturing (60 d) cowpea cultivar trial at several locations from 1996 to 2001. ‘NGVU-05-24’ was widely tested as IT93K-452-1 in Nigeria. The test locations included Ibadan, Abeokuta and Il-Ife in the forest zone; Mokwa in the humid zone; Samaru, Gombe and Bauchi in the sub-humid zone and Maiduguri and Kano in the dry savanna. The average yield of IT93K-452-1 over all the locations and years was 1088 kg ha\(^{-1}\) within 60 to 63 d maturity. It was further tested in on-farm trials in several states where it yielded 24\% higher than the check cultivars Dan Ila and IT 90K-82-2 which were at least 2 to 3 wk later in maturity at all the locations. Since all the local and improved cultivars mature from 70 d and above, this cultivar was highly appreciated by farmers. Considering its good performance and demand for an extra-early cultivar by farmers, the National Variety Release Committee gave it the national code name of NGVU-05-24 and released it formally in 2005 for cultivation in Nigeria (NCGRB 2004).

NGVU-05-24 is an \(F_6\)-derived line developed by the pedigree method of breeding from the cross involving the parents, IT86D-782 and IT90K-76. The first parent, IT86D-782 is derived from a three-way cross, (TVU 15556 × TVu 946-2) × TVu 15556. Of these, TVu 15556 is a land race, ‘Kamboinse’ from Faso, TVu-946-2 is an Achisiru type (semi-wild with 55 d maturity) selection from Nigeria and TVu 15556 is derived from a cross between TVu-3000 × IT82E-60 an early maturing aphid resistant introduced from India. IT82E-60 is derived from the cross (TVU 6203) × TVx 33-1J. The parents of TVx 33-1J are TVu 530 which represent ‘Pale Green’ from ‘Ibadan’ from Nigeria, respectively. TVu 6203 was derived from the USA. The second parent of IT93K-452-1 is a gesnerioides (Wild.) Vatke resistant line derived (B301 × IT90K-2246-4) × IT90K-2246-4. B301 came from Botswana which is resistant to two pests gesnerioides (Wild.) Vatke and Alectra vogelii (K.K. Emechebe, 1990, Singh et al., 1993). IT90K-2246-4 came from a cross between IT82D-716 and IT81D-1020. IT82D-716 is derived from a three-way cross, (TVx 6332 × TVx 1190) × TVx 1190 is a land race, ‘V.U.5’ from Kenya. ‘Prima’. TVx 3236 is from a cross between TVu 1593-9F and TVu 625. TVx 1193-9F came from the cross (TVx 1193-9F × TVu 625). TVx 1193-9F is derived from a cross between TVx 6332 and TVu 1193-9F is derived from a cross between TVx 6332 and TVu 1190 is a land race, ‘Kano-8’ from Nigeria. IT81D-1020 is derived from a cross between TVu 1593-9F and TVu 2027 which is ‘Kano-8’ from Nigeria. IT81D-1020 is derived from a cross between TVx 6332 and TVu 1190 is a land race, ‘Kano-8’ from Nigeria.

‘NGVU-05-24’ is an extra-early (60 d) variety with plant type and semi-determinate growth habit. The variety is heat tolerant photoperiod insensitive and therefore widely adapted. The leaves are broad and dark green. The variety is heat tolerant, photoperiod insensitive and therefore widely adapted. The purple margins on both the wings and standard borne on a purple-pigmented, non-branching-peduncle, have a measure between 15 and 20 cm in length with 12 to 16 seeds per pod. The seeds are white, medium size (100 seeds weighs 14–16 g) with rough texture and large black eye. The grains contain g) with rough texture and large black eye. The grains contain 0.75 seeds per pod. The seeds are white, medium size (100 seeds weighs 14–16 g) with rough texture and large black eye. The grains contain 0.75 seeds per pod.

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