

International Bean Yield and Adaptation Nursery (IBYAN)

The below tables give an overview of the materials distributed by CIAT, and the number of these materials that were used by national programs to develop varieties for release. This overview does not include the countless number of lines used by scientists worldwide for special studies in diverse disciplines to develop bean populations with desirable traits or varieties*.

Bush Bean Lines and Varieties of Different Market Classes Included in the IBYAN between 1976-1995 and Released as Varieties in Different Countries

Table 1. Summary of bush bean genetic materials tested in the IBYAN and the number of lines used to develop varieties, 1976–1995.

| | Lines (no.) | | | | | |
|-------------------------------------|-------------|-----------------------|-----------|--------------------|--|--|
| Source | _ | Released as varieties | | | | |
| | Tested | Latin America | Elsewhere | Total ^a | | |
| CIAT lines | 1577 | 75 | 24 | 97 | | |
| Germplasm bank (G no.) ^b | 79 | 15 | 4 | 17 | | |
| National programs | 266 | 6 | - | 6 | | |
| Total | 1922 | 96 | 28 | 120 | | |

a. Includes real number of lines used worldwide. The use of each line was recorded only once.

Statistics for Each Color Group

Table 2. IBYAN: Black market classes: Black, Black Turtle.

| | Lines (no.) | | | | | |
|------------|-------------|-----------------------|-----------|--------------------|--|--|
| Source | Tested | Released as varieties | | | | |
| | | Latin America | Elsewhere | Total ^a | | |
| CIAT lines | 205 | 31 | - | 31 | | |

^{*} The real number of varieties released is much higher because several of these lines served as the basis for varieties released in more than one country (not reflected in tables), thus explaining why total horizontal sums are not exact.

b. G no.= those bean materials that have a G accession number in the germplasm bank held at CIAT

| Germplasm bank (G nNo.) ^b | 28 | 4 | 1 | 4 |
|--------------------------------------|-----|----|---|----|
| National Programs | 14 | 1 | - | - |
| Total | 247 | 36 | 1 | 35 |

a. Includes real number of lines used worldwide. The use of each line was recorded only once.

Table 3. IBYAN: White market classes: Navy, Small white, White Kidney, Marrow, Great Northern, and Alubia.

| | Lines (No.) | | | | | |
|-------------------------------------|-------------|-----------------------|-----------|--------------------|--|--|
| Source | _ | Released as varieties | | | | |
| | Tested | Latin America | Elsewhere | Total ^a | | |
| CIAT lines | 191 | 5 | 3 | 7 | | |
| Germplasm bank (G no.) ^b | 11 | 3 | 1 | 3 | | |
| National programs | 54 | 1 | - | 1 | | |
| Total | 256 | 9 | 4 | 11 | | |

a. Includes real number of lines used worldwide. The use of each line was recorded only once.

Table 4. IBYAN: Cream-colored market classes: Mulatinho, Carioca, Cranberry, Pinto, Bayo.

| | Lines (No.) | | | | | |
|-------------------------------------|-------------|-----------------------|-----------|--------------------|--|--|
| Source | _ | Released as varieties | | | | |
| | Tested | Latin America | Elsewhere | Total ^a | | |
| CIAT lines | 424 | 11 | 10 | 21 | | |
| Germplasm bank (G no.) ^b | 16 | 3 | 1 | 3 | | |
| National programs | 51 | - | - | - | | |
| Total | 491 | 14 | 11 | 24 | | |

a. Includes real number of lines used worldwide. The use of each line was recorded only once.

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Table 5. IBYAN: Yellow market classes: Azufrado, Peruanos, Canario, Jalo, Manteca, Garbancillo, Jalinho, Liborino.

| | Lines (No.) | | | | | |
|-------------------------------------|-------------|-----------------------|-----------|--------------------|--|--|
| Source | _ | Released as varieties | | | | |
| | Tested | Latin America | Elsewhere | Total ^a | | |
| CIAT lines | 66 | 2 | 1 | 3 | | |
| Germplasm bank (G no.) ^b | 4 | 1 | - | 1 | | |
| National programs | 82 | - | - | - | | |
| Total | 152 | 3 | 1 | 4 | | |

a. Includes real number of lines used worldwide. The use of each line was recorded only once.

Table 6. IBYAN: Pink market classes: Light Red Kidney, Red Kidney, Pink, Rosinha, Uribe Rosado, Andean, Miss Kelly, Flor de Mayo.

| | Lines (No.) | | | | | |
|-------------------------------------|-------------|-----------------------|-----------|--------------------|--|--|
| Source | _ | Released as varieties | | | | |
| | Tested | Latin America | Elsewhere | Total ^a | | |
| CIAT lines | 113 | 4 | 2 | 6 | | |
| Germplasm bank (G no.) ^b | 6 | 1 | - | 1 | | |
| National programs | 18 | - | - | - | | |
| Total | 137 | 5 | 2 | 7 | | |

a. Includes real number of lines used worldwide. The use of each line was recorded only once.

Table 7. IBYAN: Red market classes: Small red, Red Mexican, Radical, Dark Red Kidney, Duva, Pompadour Nima/Calima (Red Pinto).

| | Lines (No.) | | | | |
|------------|-------------|-----------------------|-----------|--------------------|--|
| Source | Tested | Released as varieties | | | |
| | | Latin America | Elsewhere | Total ^a | |
| CIAT lines | 575 | 22 | 8 | 29 | |

 $b. \ \ G \ no. = those \ bean \ materials \ that \ have \ a \ G \ accession \ number \ in \ the \ germplasm \ bank \ held \ at \ CIAT.$

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| Germplasm bank (G no.) ^b | 10 | 3 | 1 | 3 |
|-------------------------------------|-----|----|---|----|
| National programs | 41 | 4 | - | - |
| Total | 626 | 29 | 9 | 32 |

a. Includes real number of lines used worldwide. The use of each line was recorded only once.

Table 8. IBYAN: Other color market classes: Chumbinho, Tortola, Purple.

| | Lines (No.) | | | | | |
|-------------------------------------|-------------|-----------------------|-----------|-------|--|--|
| Source | | Released as varieties | | | | |
| | Tested | Latin America | Elsewhere | Total | | |
| CIAT lines | 3 | - | - | - | | |
| Germplasm bank (G no.) ^b | 4 | - | - | - | | |
| National programs | 6 | - | - | - | | |
| Total | 13 | - | - | - | | |

a. Includes real number of lines used worldwide. The use of each line was recorded only once.

Genetic Material not Included in the IBYAN

Table 9. Number of bush bean lines from CIAT and national programs (NP) released as varieties in different countries of Latin America (LA) and elsewhere, 1976–1999.

| | CIAT genetic material | | | NP genetic material | | | | |
|------------------|-------------------------|-----------|------------------------------|---------------------|---|-----------|-------------------------------|-----------|
| Seed color group | Advanced ILines (coded) | | NP selections in populations | | Lines/Varieties (without G no.) ^a | | Germpla: acces: (with G | sions |
| | LA | Elsewhere | LA | Elsewhere | LA | Elsewhere | LA | Elsewhere |
| Black | 5 | - | 17 | - | 2 | 1 | - | - |
| White | 2 | 9 | 6 | - | - | - | - | 3 |
| Cream | 6 | 2 | 3 | 1 | 1 | - | - | 2 |

b. G no. = those bean materials that have a G accession number in the germplasm bank held at CIAT.

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|--------------|----|-----|----|---|---|---|---|----|
| Total | 38 | 31 | 38 | 3 | 4 | 1 | 1 | 5 |
| Snap bean | 4 | 1 | - | - | - | - | - | - |
| Other colors | - | 5 | - | - | - | - | - | - |
| Red | 18 | 11 | 12 | 2 | - | - | - | - |
| Pink | 1 | 2 | - | - | 1 | - | 1 | - |
| Yellow | 2 | 1 | - | - | - | - | - | - |

Total no. of lines releases as varieties^b: 116

Climbing Beans

Table 10. Climbing bean lines (growth habit IV) distributed by CIAT nurseries and released as varieties in different countries of Latin America (LA) and Africa, 1976–1999.

| Seed color group | CIAT lines | | Germplasm bank accessions | | National program contribution | |
|------------------|------------|--------|---------------------------|--------|-------------------------------|--------|
| | LA | Africa | LA | Africa | LA | Africa |
| White | - | 2 | 1 | 1 | - | - |
| Cream | - | 1 | 2 | - | 1 | - |
| Yellow | 1 | - | 1 | - | - | - |
| Pink | - | - | - | 1 | - | - |
| Red | 1 | 2 | 1 | 1 | - | - |
| Purple | 1 | - | - | - | - | - |
| Total | 3 | 5 | 5 | 3 | 1 | - |

a. Includes real number of lines used worldwide. The use of each line was recorded only once

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