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Technology Assessed and Transferred

- **Directorate of Sorghum Research, Hyderabad**

  α-designs have been suggested for the AVHT and IVHT trials conducted under the aegis of All India Co-ordinated Sorghum Improvement Programme. These designs are resolvable block designs and have been generated through computer aided search. The parameters and layouts of different α-designs recommended are:

(i) $v = 33$, $b = 9$, r = 3, $k = 11$, A-efficiency = 0.9682, D-efficiency = 0.9860 (IVHT)

REPLICATION 1

Block-1	1	4	7	10	13	16	19	22	25	28	31
Block-2	2	5	8	11	14	17	20	23	26	29	32
Block-3	3	6	9	12	15	18	21	24	27	30	33

REPLICATION 2

Block-1	1	5	9	10	15	17	21	23	26	29	33
Block-2	2	6	7	11	13	18	19	24	27	30	31
Block-3	3	4	8	12	14	16	20	22	25	28	32

REPLICATION 3

Block-1	1	4	9	11	14	18	20	24	27	30	32
Block-2	2	5	7	12	15	16	21	22	25	28	33
Block-3	3	6	8	10	13	17	19	23	26	29	31

Different randomized layouts of this design were provided for 16 locations.

(ii) $v = 28$, $b = 12$, $r = 3$, $k = 7$, A-efficiency = 0.9603, D-efficiency = 0.9812 (AVHT shallow soil)

REPLICATION 1

Block-1	1	5	9	13	17	21	25
Block-2	2	6	10	14	18	22	26
Block-3	3	7	11	15	19	23	27
Block-4	4	8	12	16	20	24	28

REPLICATION 2

Block-1	1	6	11	16	19	22	28
Block-2	2	7	12	13	20	23	25
Block-3	3	8	9	14	17	24	26
Block-4	4	5	10	15	18	21	27

REPLICATION 3

Block-1	1	8	12	14	18	23	27
Block-2	2	5	9	15	19	24	28
Block-3	3	6	10	16	20	21	25
Block-4	4	7	11	13	17	22	26

(iii) v = 16, b = 6, r = 3, k = 8, A-efficiency = 0.9683, D-efficiency = 0.9859 (AVHT deep soil)

REPLICATION 1

Block 1	1	3	5	7	9	11	13	15
Block 2	2	4	6	8	10	12	14	16

REPLICATION 2

Block 1	1	4	5	8	10	12	13	16
Block 2	2	3	6	7	9	11	14	15

REPLICATION 3

Block 1	1	4	6	8	9	11	14	15
Block 2	2	3	5	7	10	12	13	16

Splice Site Collection & Rice Genome

- A web-based functional elements information system and SNP-centric functional elements database of rice genome (http://bioinformatics.iasri.res.in/BAMAST/ BAM.html) has been developed for the users. Visual graphic display tool (genome browser) for annotation of functional elements on rice genome has also been developed. Some screen shots for the Information System are: