

**Sowmiya M, Manonmani S, Selvi NR, Saraswathi R, Suresh R, Gopalakrishnan C, Raveendran M, Dhamotharan P. Identification of false smut - resistant donors in Rice (*Oryza sativa* L.) and analysis of their morpho-molecular diversity for resistance breeding. Plant Science Today (Early Access). <https://doi.org/10.14719/pst.4242>**

**Field photo of the screening process done at the hotspot region (Gudalur)**



**Resistant check (RG170 – RPHP42, RG172- IG25); Disease incidence in the Susceptible check (CO43, CO(R)50)**



**Disease symptoms in different accessions**

**Highly resistant lines**



IG71



Periya chandiyar



Thillainayagam



Thulasi vasanai samba



koolavalai



RPHP163

### **Resistant lines**



Vadakathi  
sambha



Arupatham  
vellai



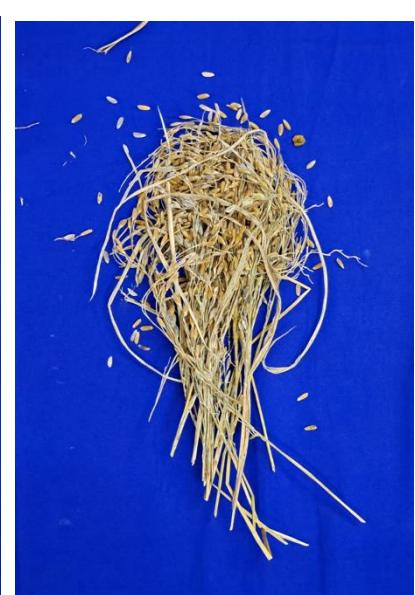
Burma block



Karungan



Vadivel



Norungan

### Moderately Resistant lines



Godavari samba



Karthigai sambha



Pamani sambha

### Moderately susceptible lines



Rajamudi



Uppumulagai



Varigarudan samba  
selection

**False smut incidence in the resistant and susceptible check**



**Hundred grains of different accessions were given category wise**

**Highly resistant**



channagi



Thulasivasanai  
samba



Periya  
chandiyar



Earapalli  
samba



Thillainayagam

**Resistant**



Arupatham  
samba



Ghandhasala



Chinnadukkune I



karungam



Vadakathi  
samba



Periya  
chandiyar



Arasambha



Mangam  
samba



Vadivel



Purpleputtu



RPHP104



IG49

**Moderately resistant**



Kama samba



Pamani samba



RPHP125



Kalarkar



Karthigai samba

**Moderately susceptible**



Chithan samba



Rajamudi



IG75



Red sirumani



Uppumulagai



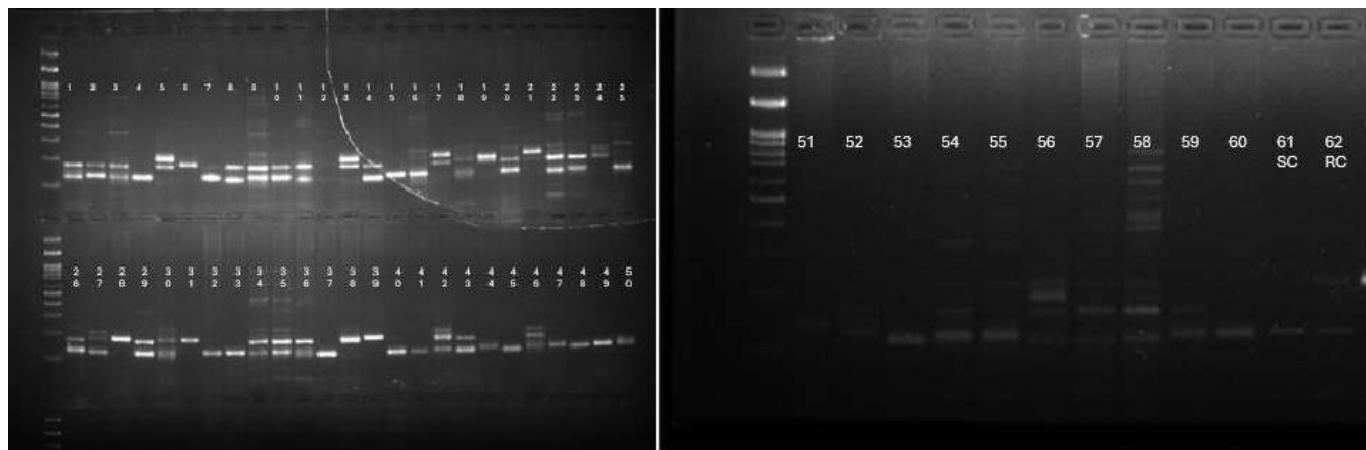
Nootripatum



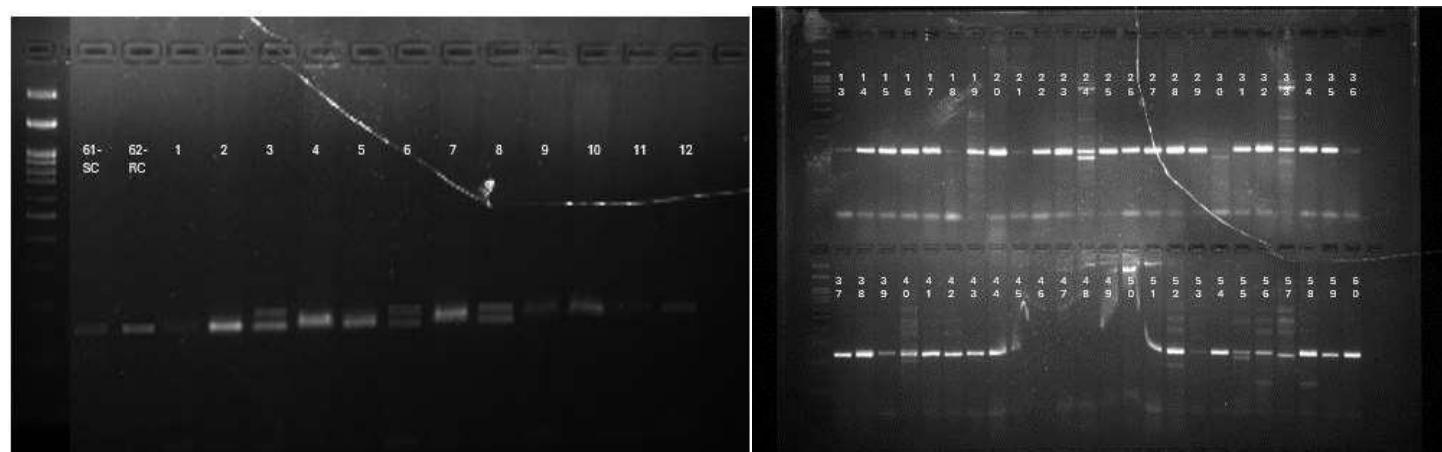
Murungankar

**The gel pictures of the 41 markers ( Refer Table 1 for the genotype names)**

1) RM 9

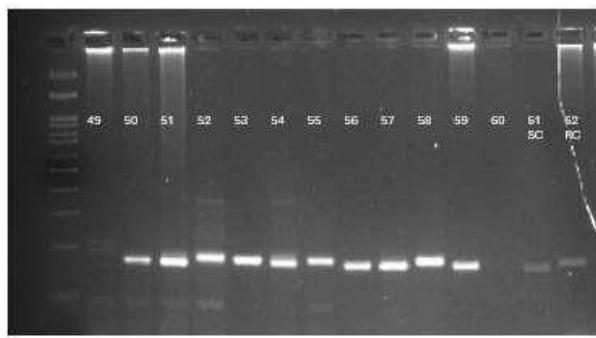
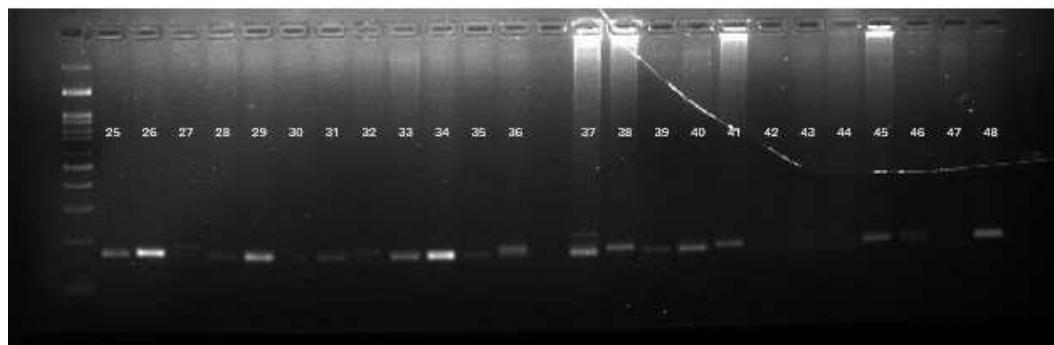


2) RM 104

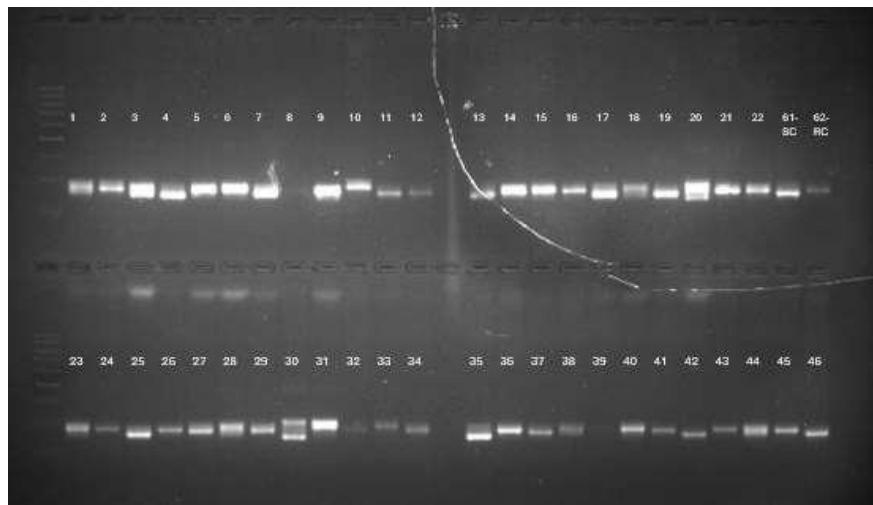


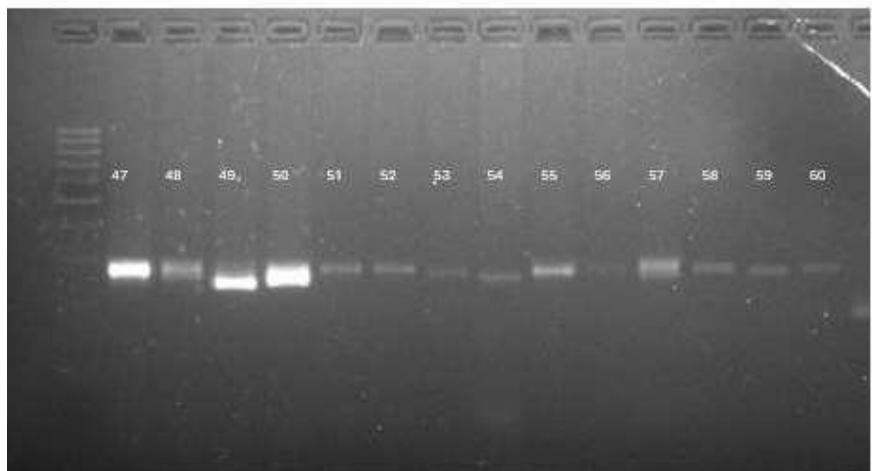
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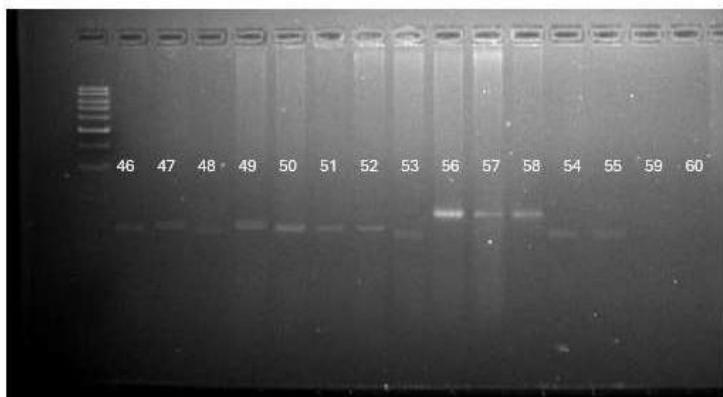
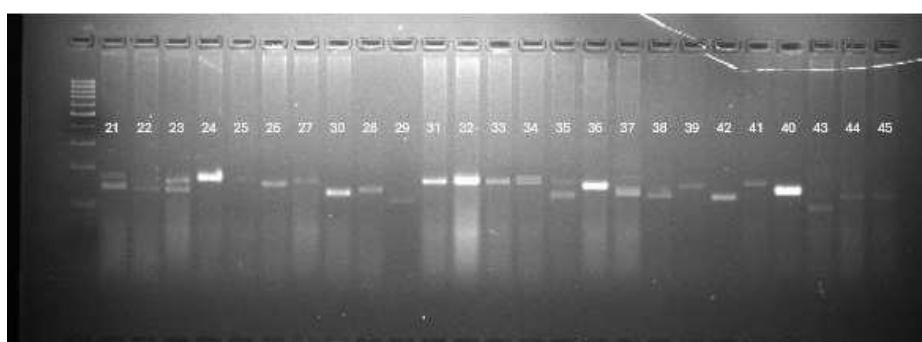
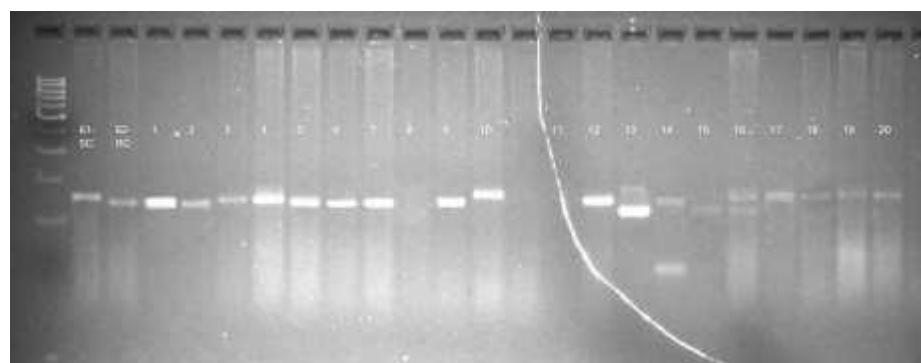


#### 4) RM13679

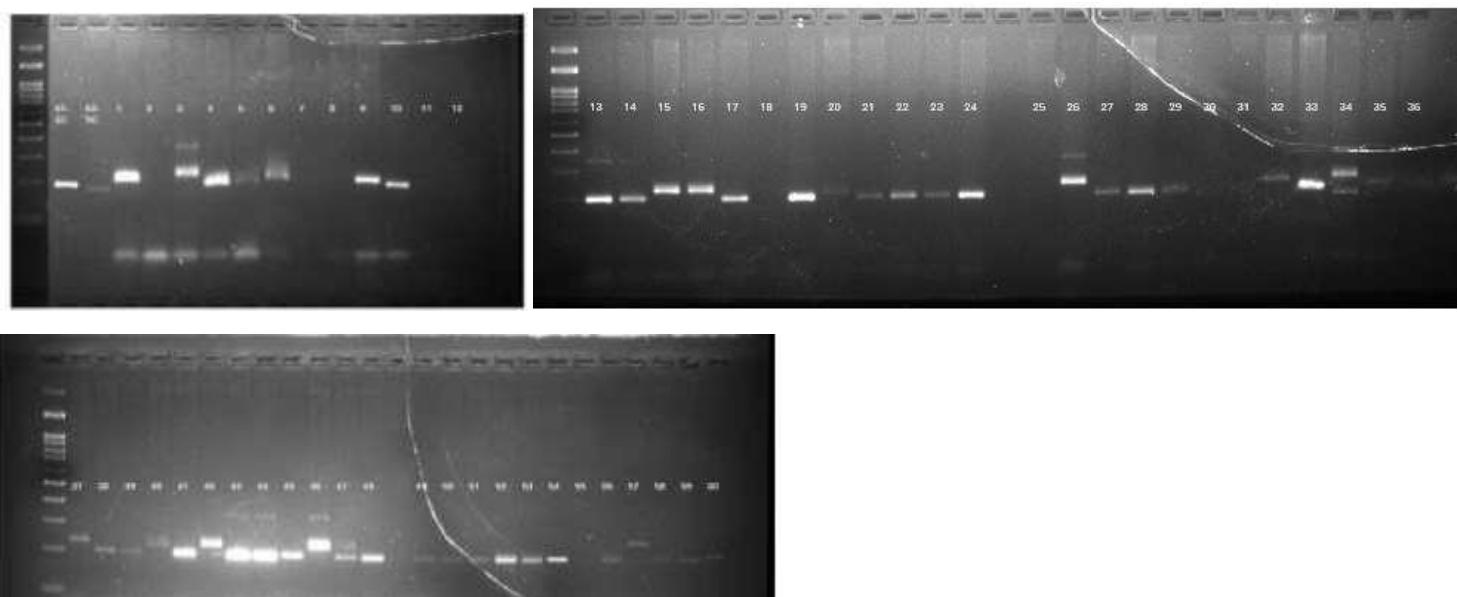




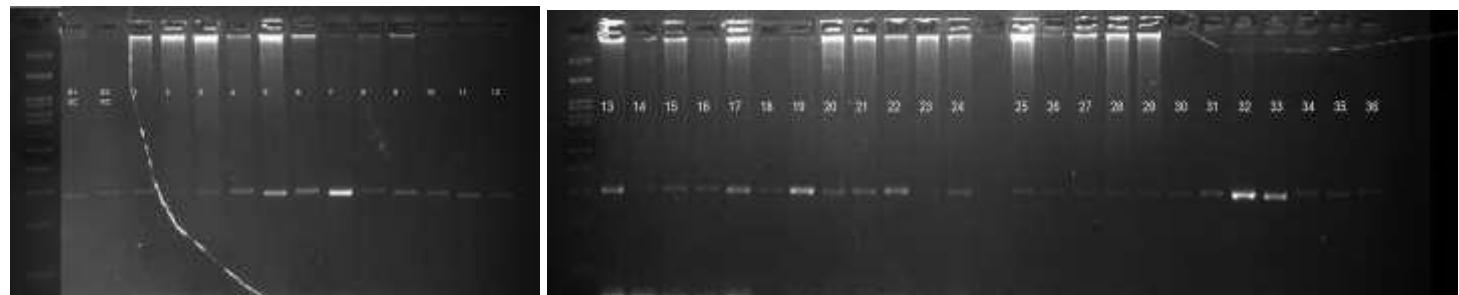
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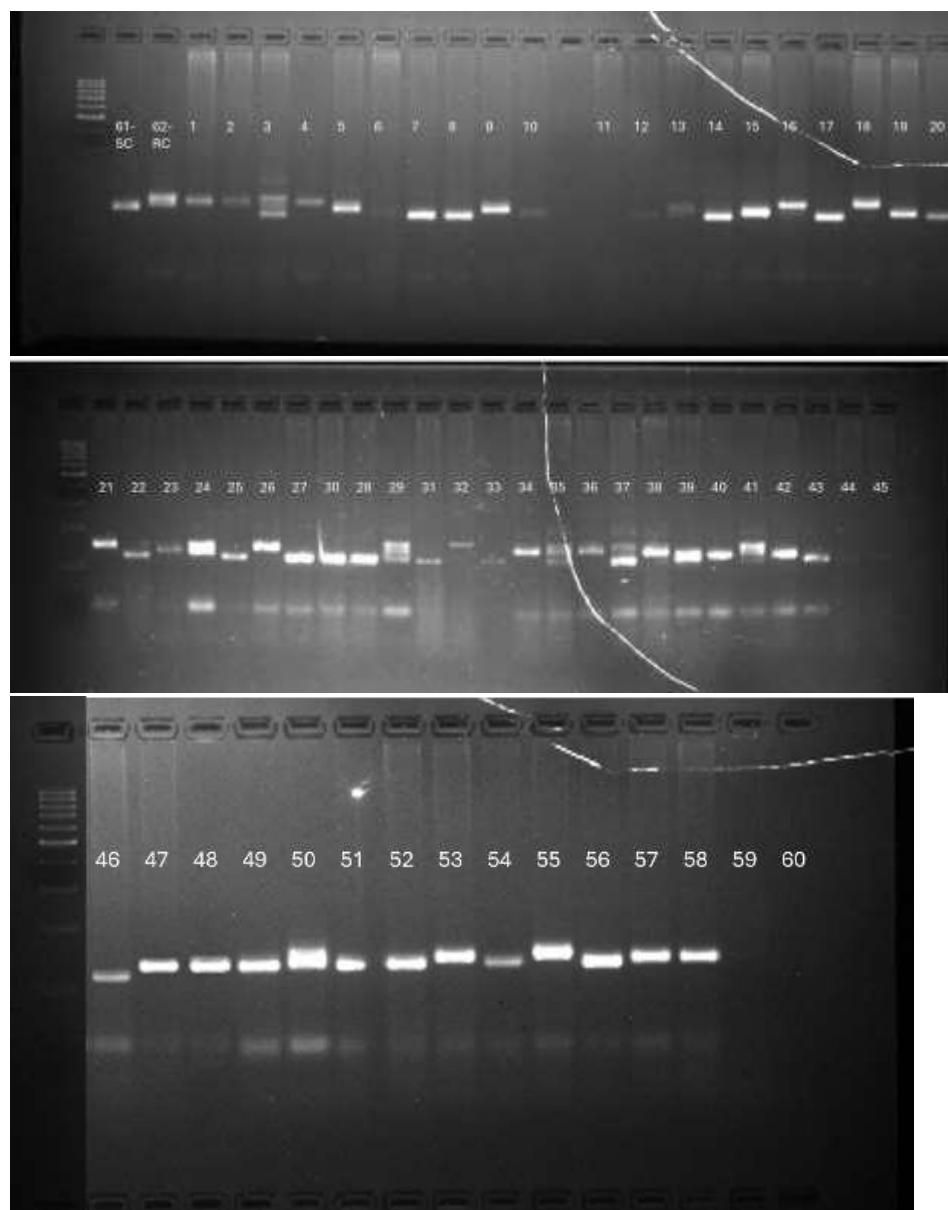
6) RM 5638



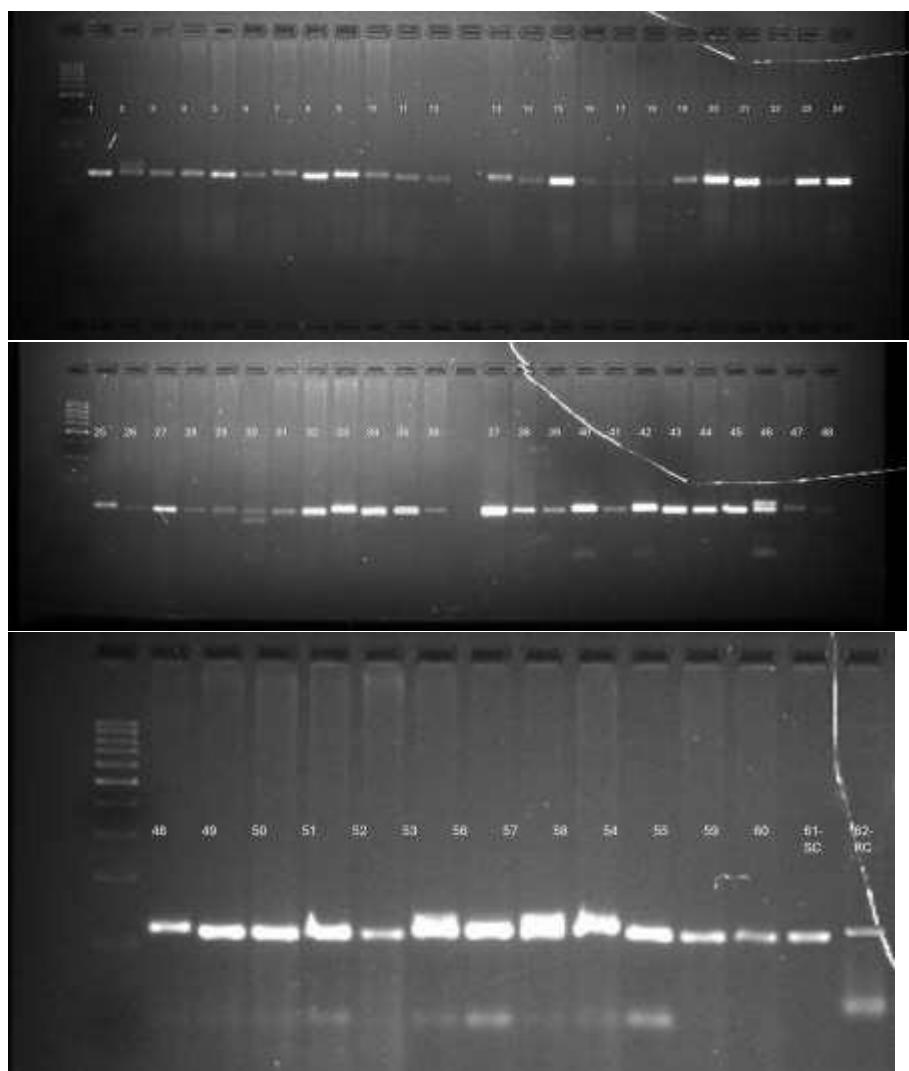
7) RM 7056



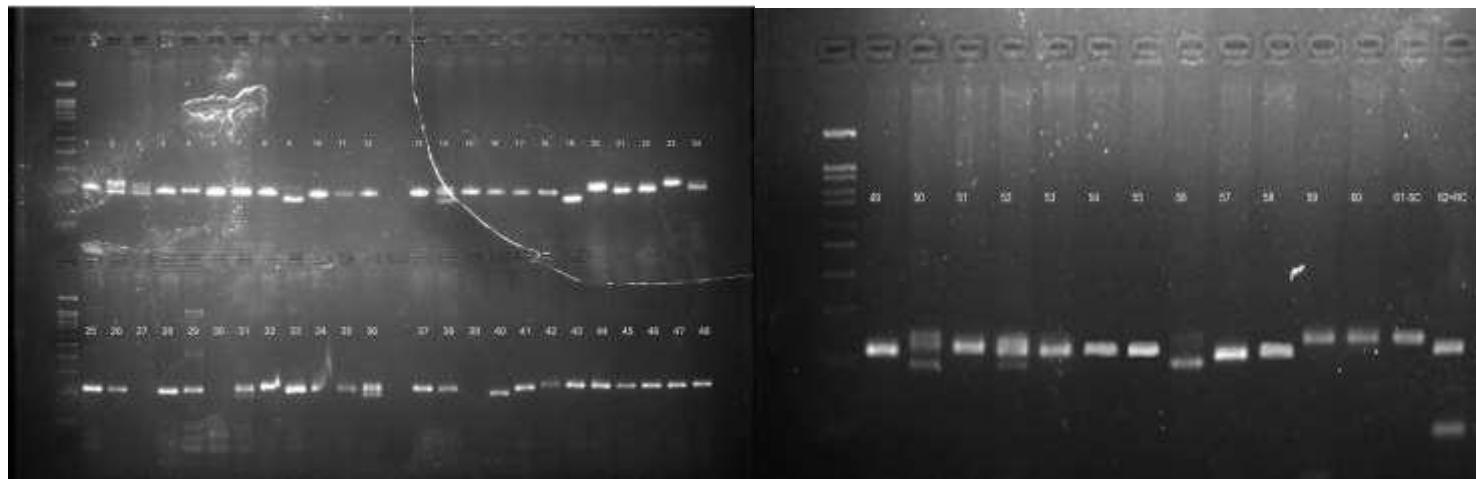
**8) RM336**



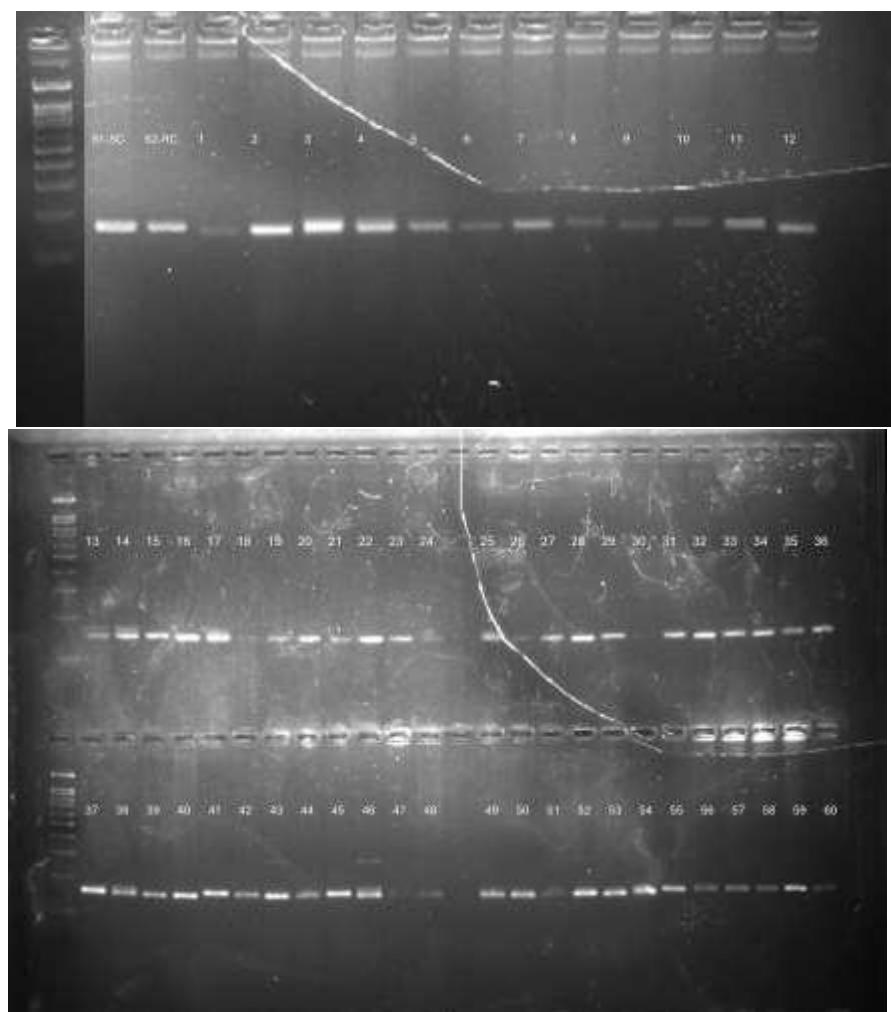
9) RM229



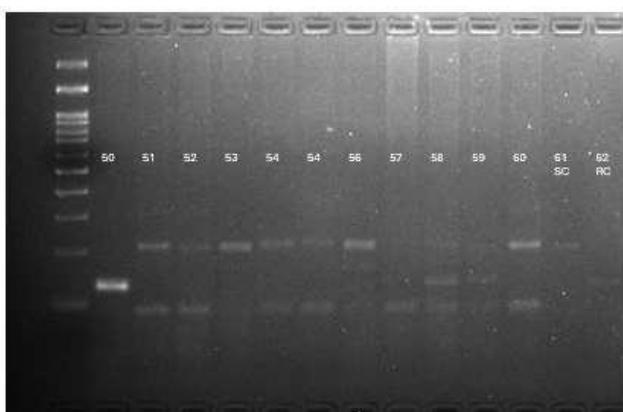
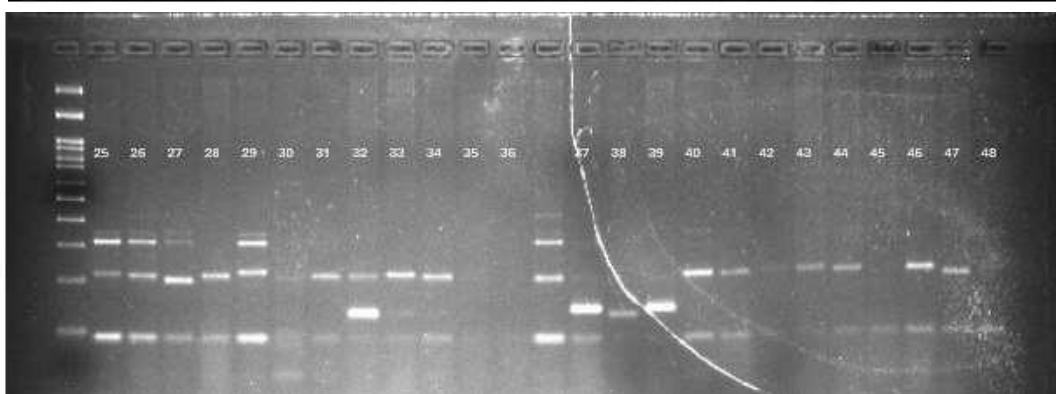
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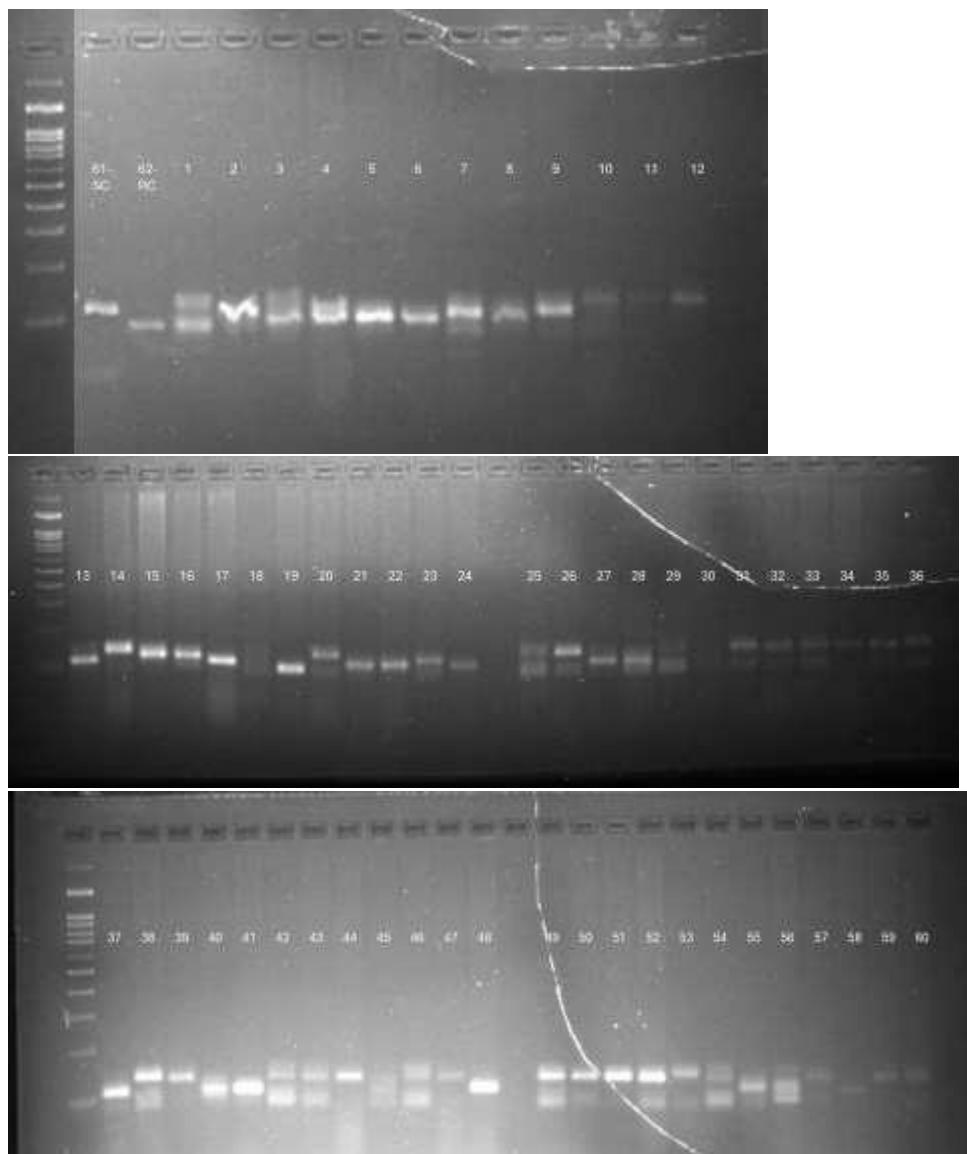
11) RM244



12)RM3694

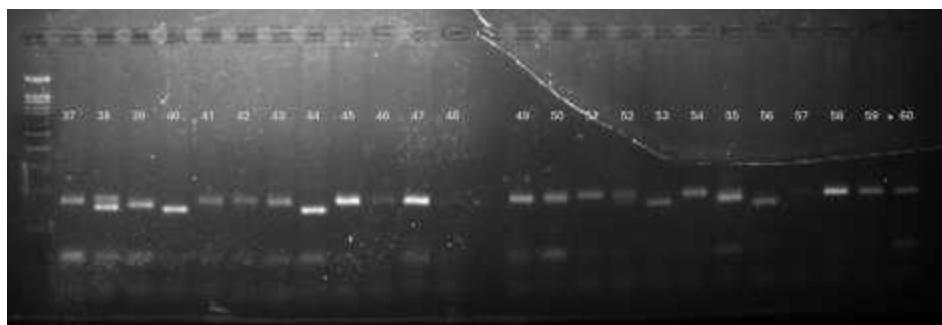


**13) RM235**

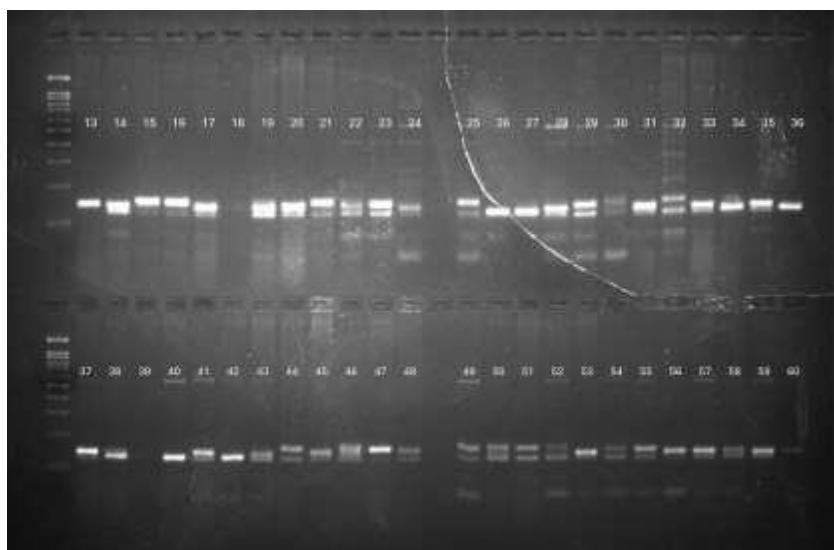
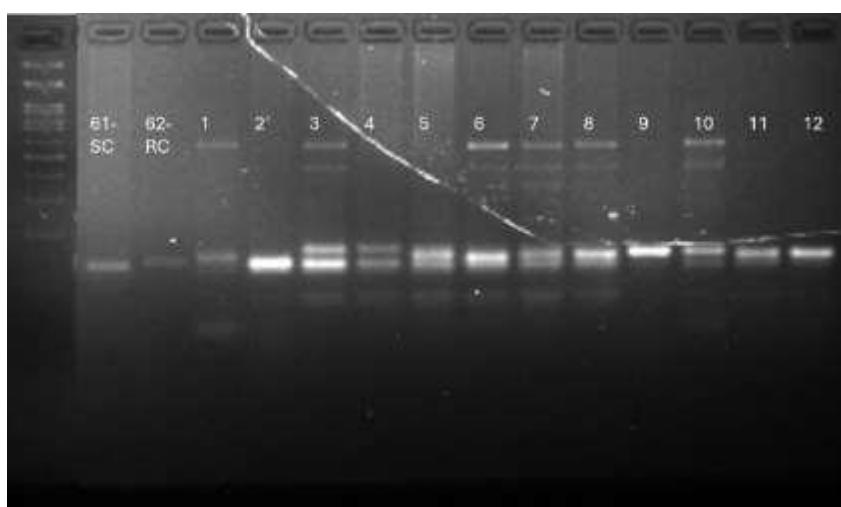


**14) RM264**

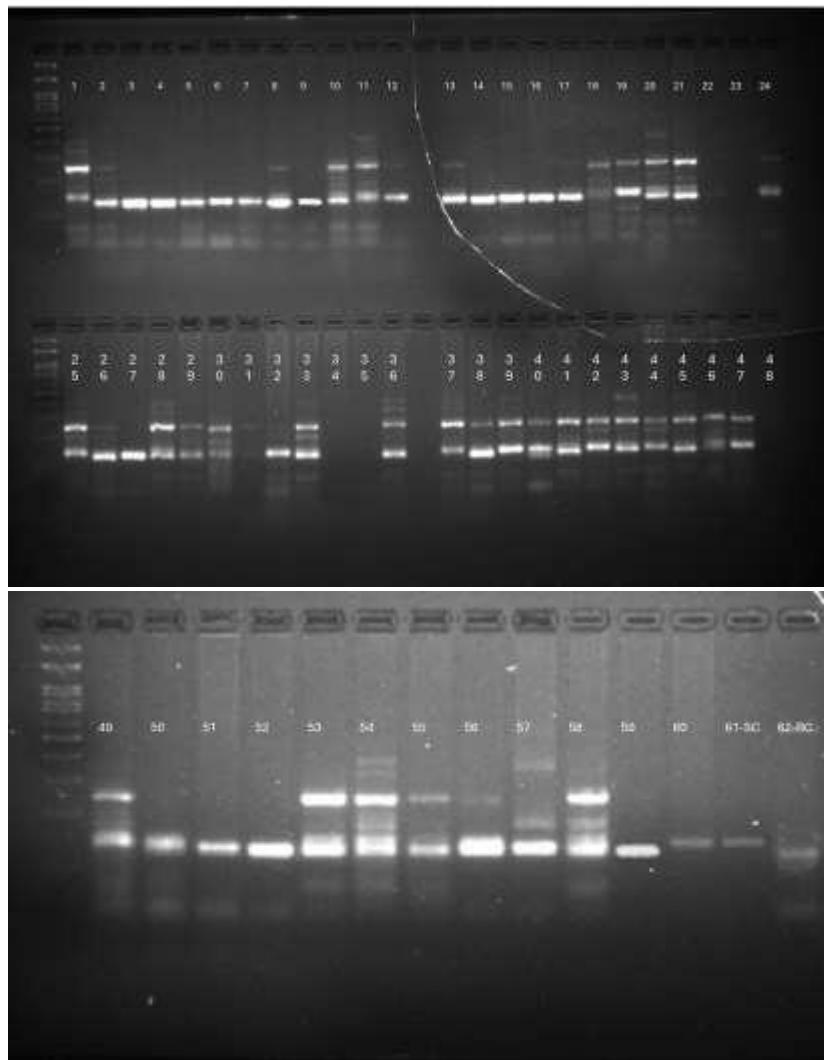




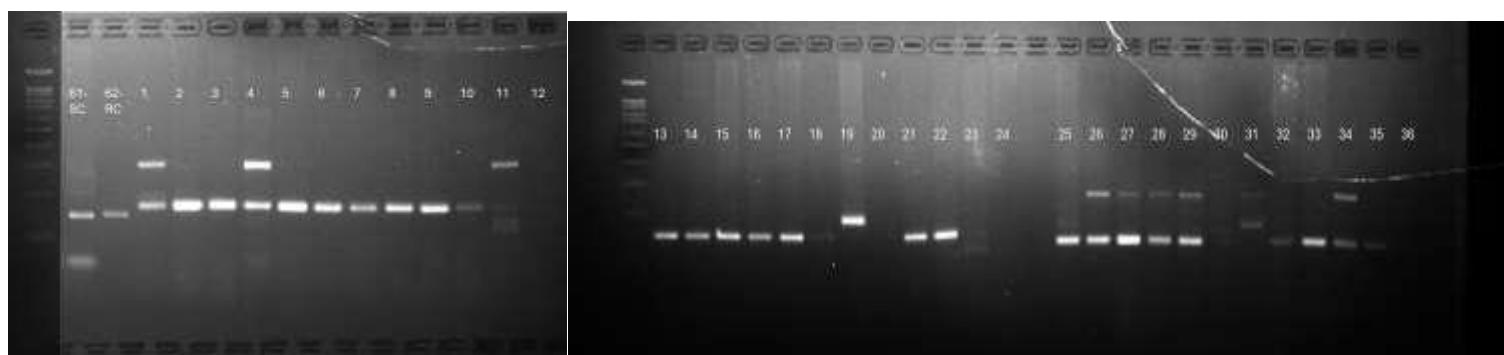
15)RM 152

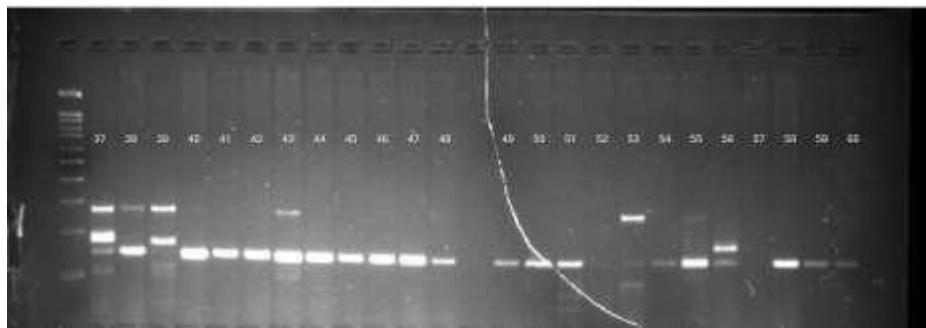


**16) RM6208**

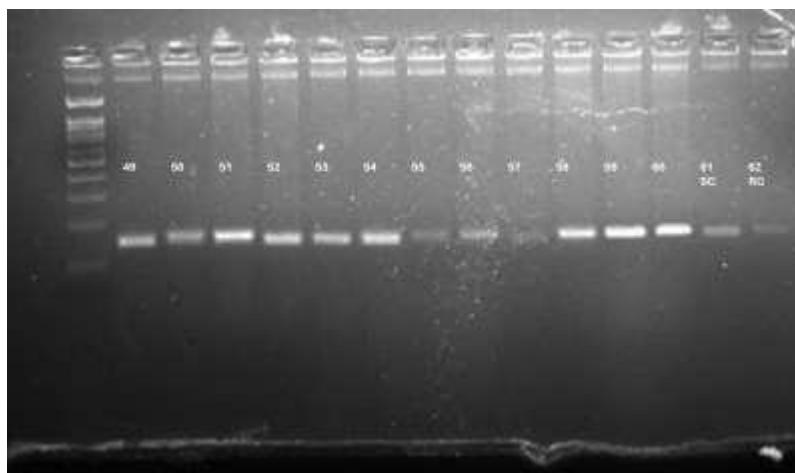
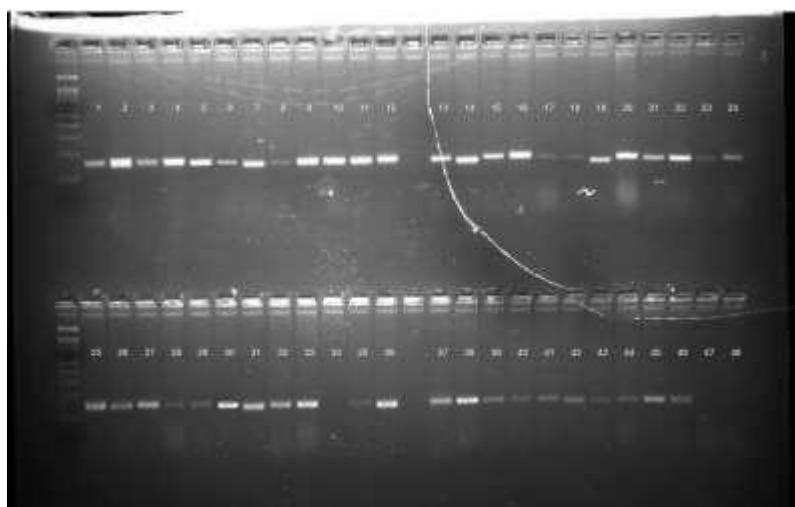


**17) RM339**

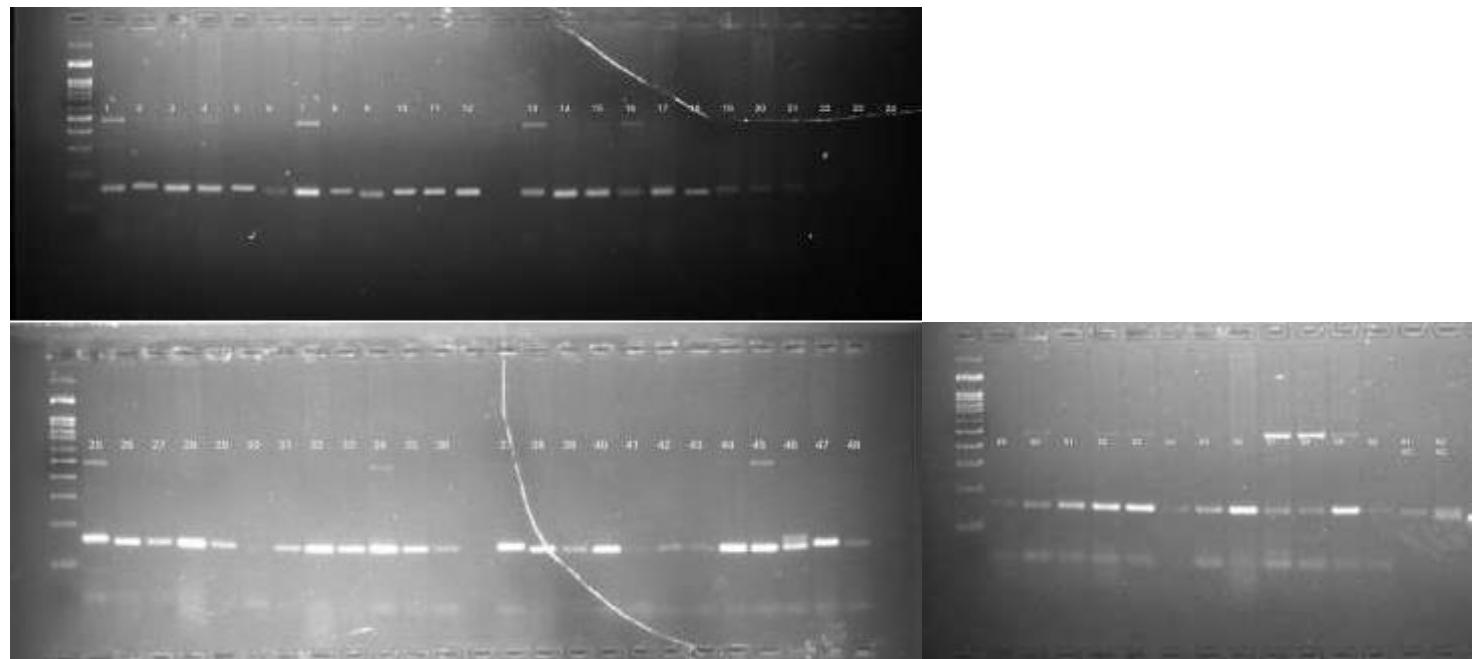




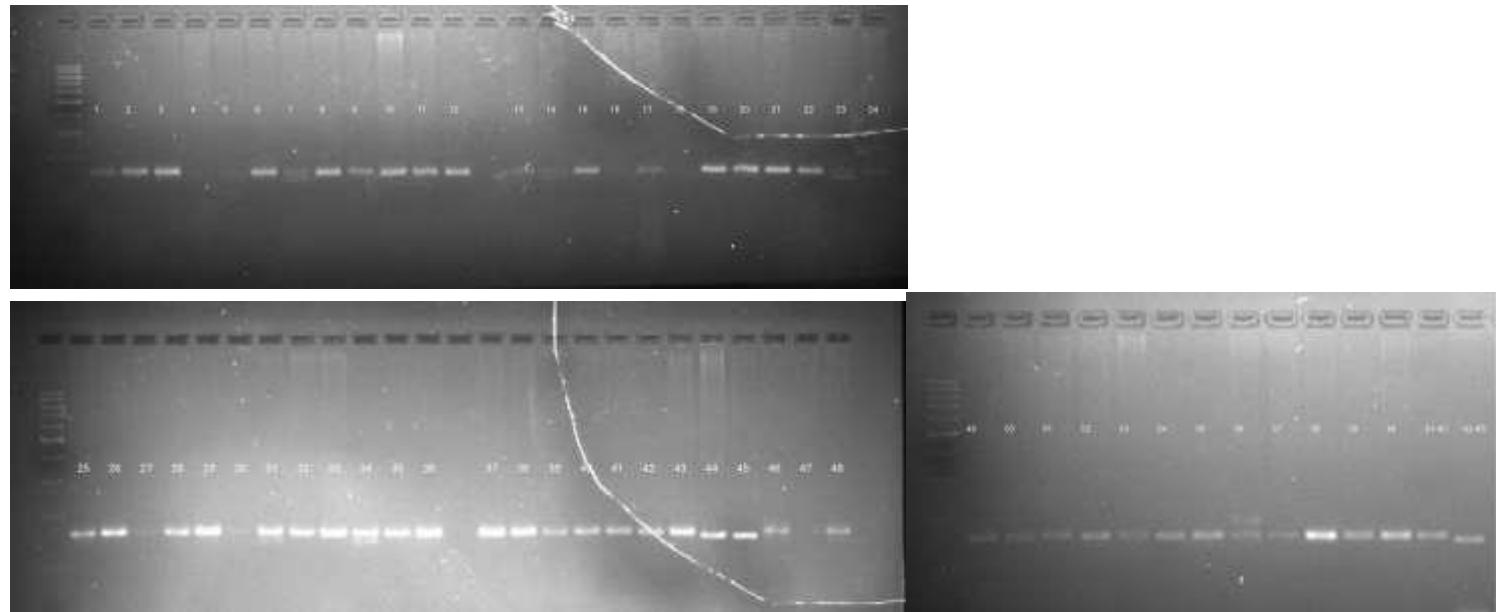
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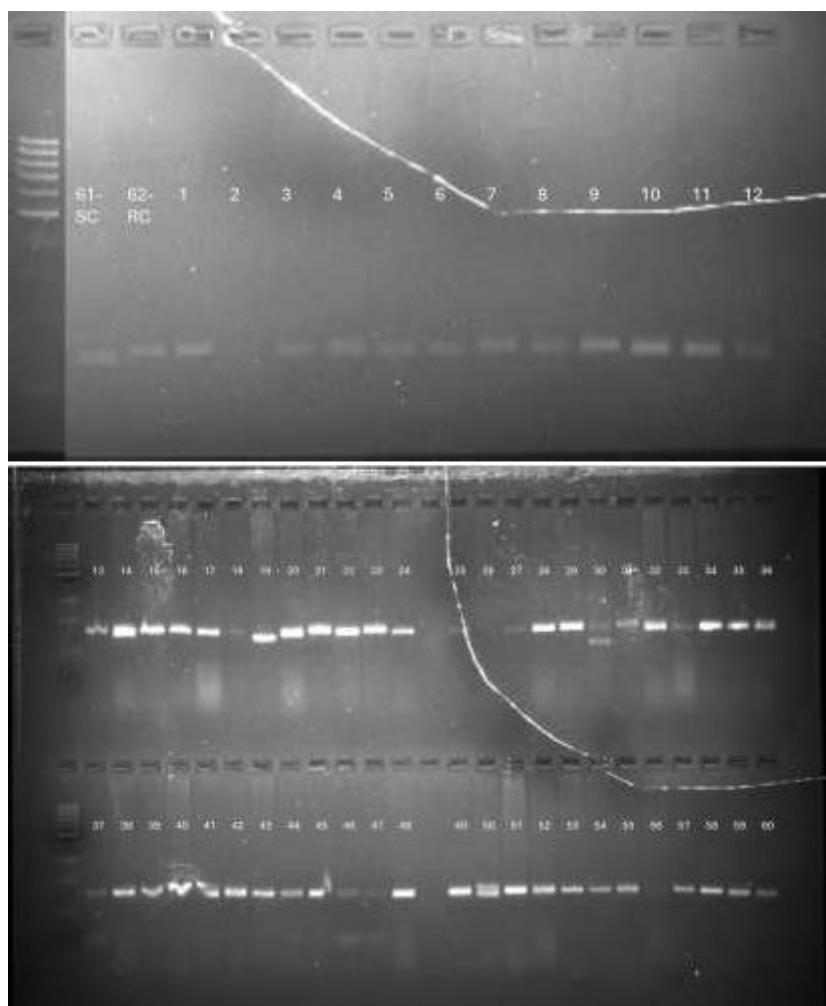
19) RM6947



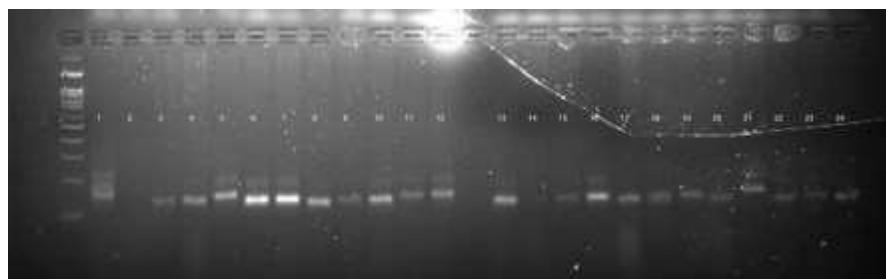
20) RM429

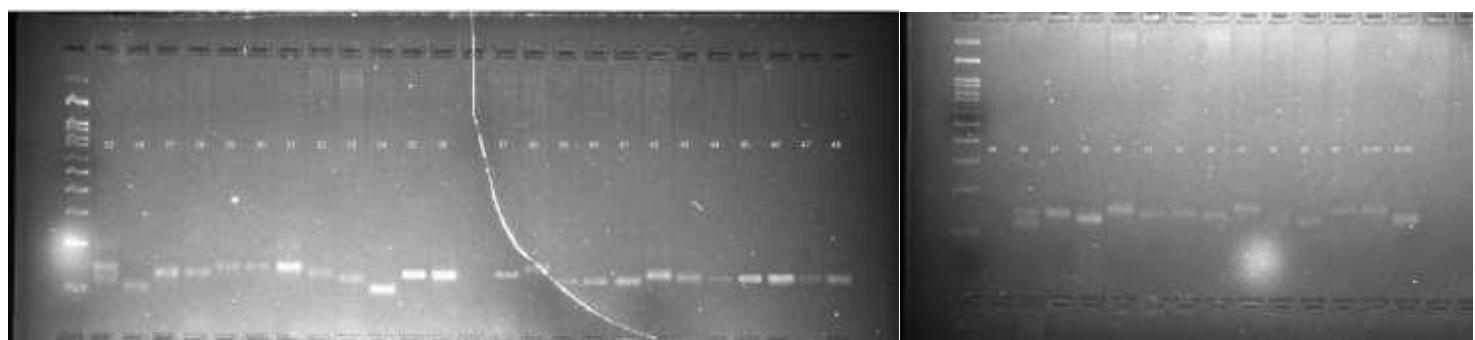


**21) RM234**

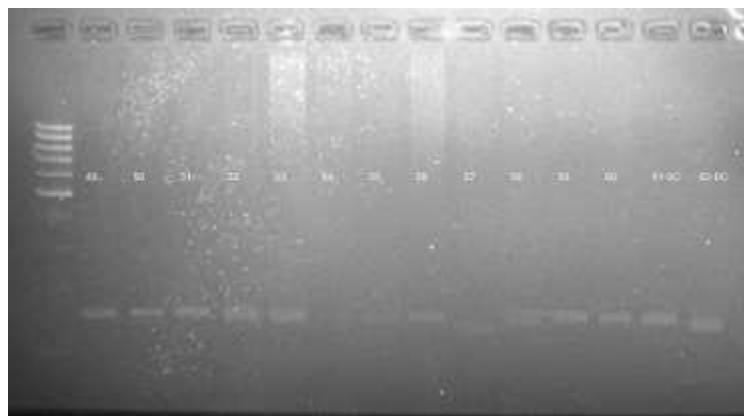
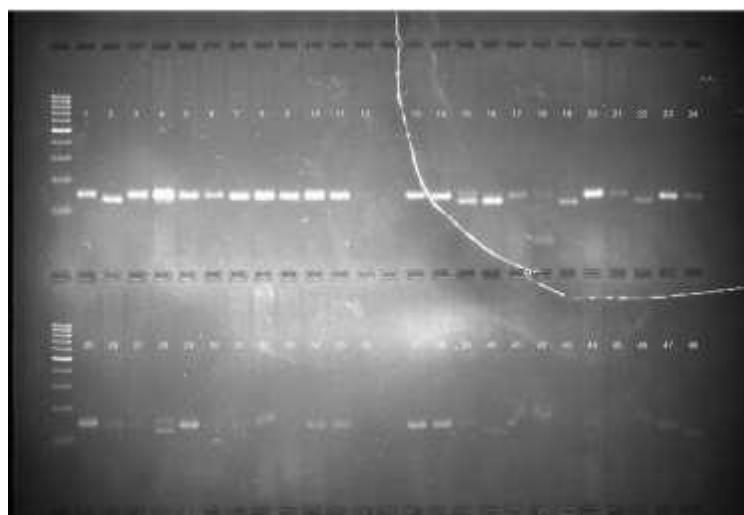


**22) RM 5926**

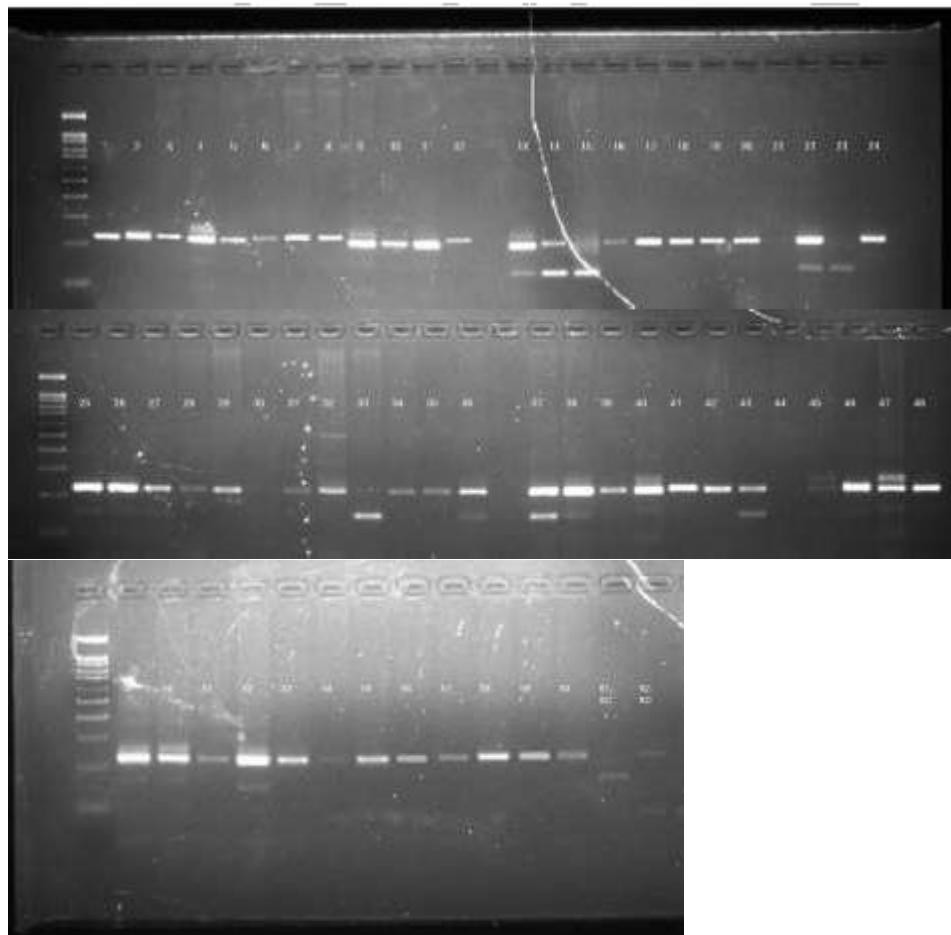




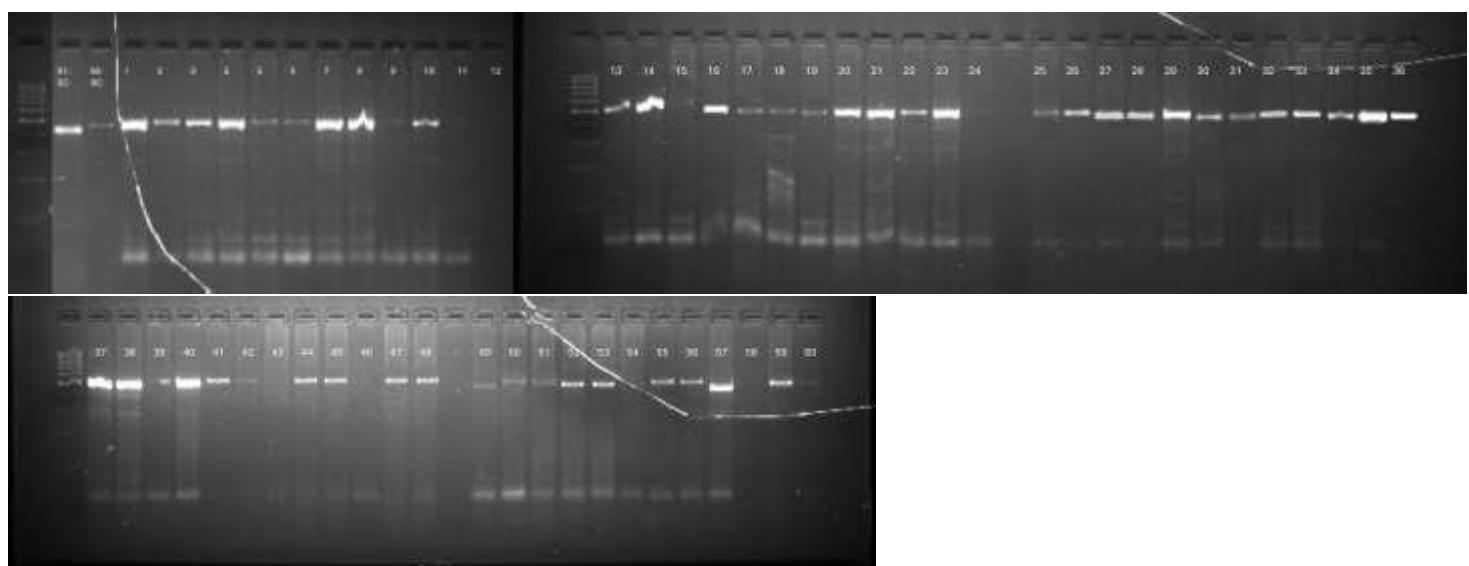
23)RM11



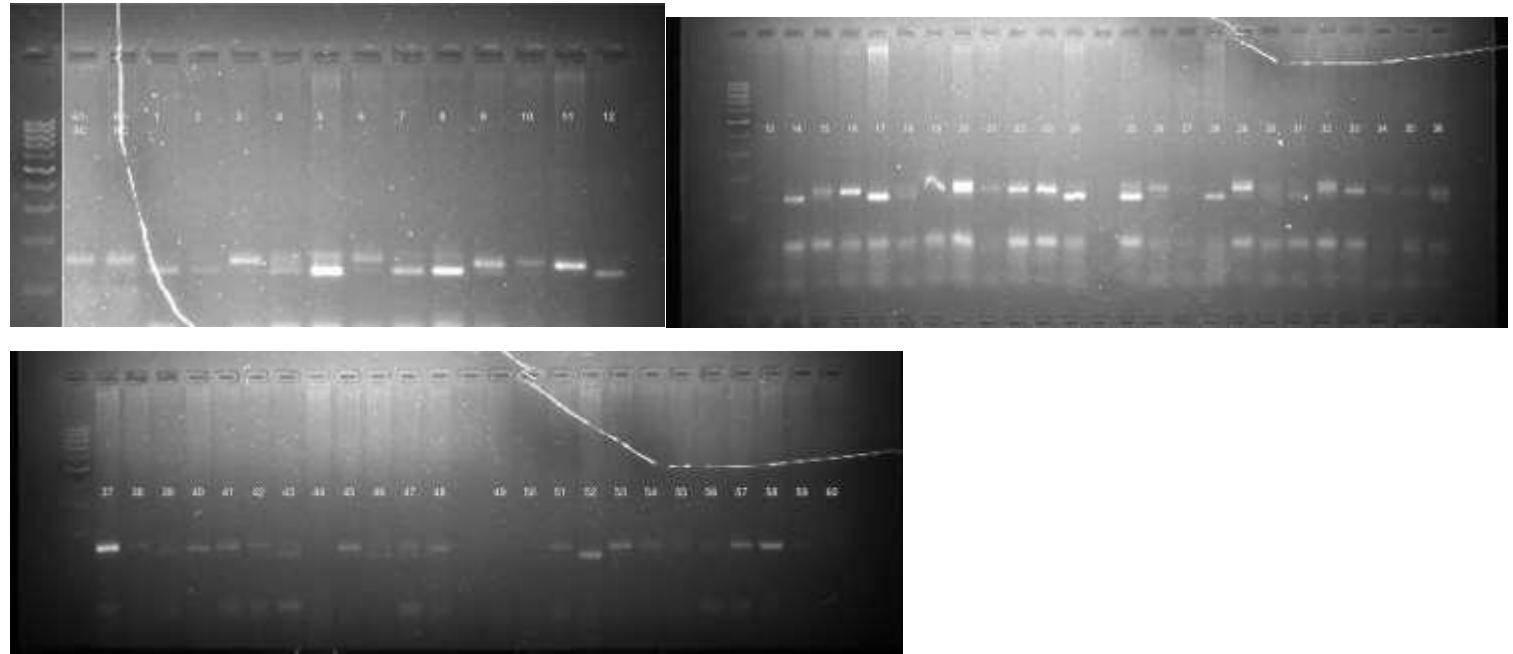
**24) RM 464**



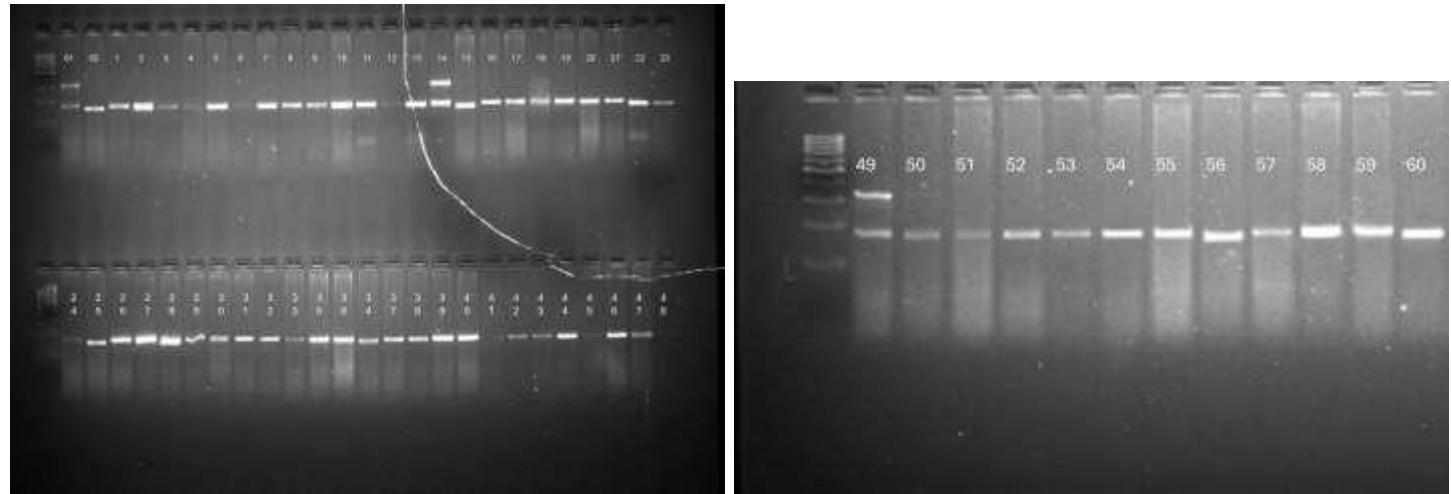
**25) RM26627**



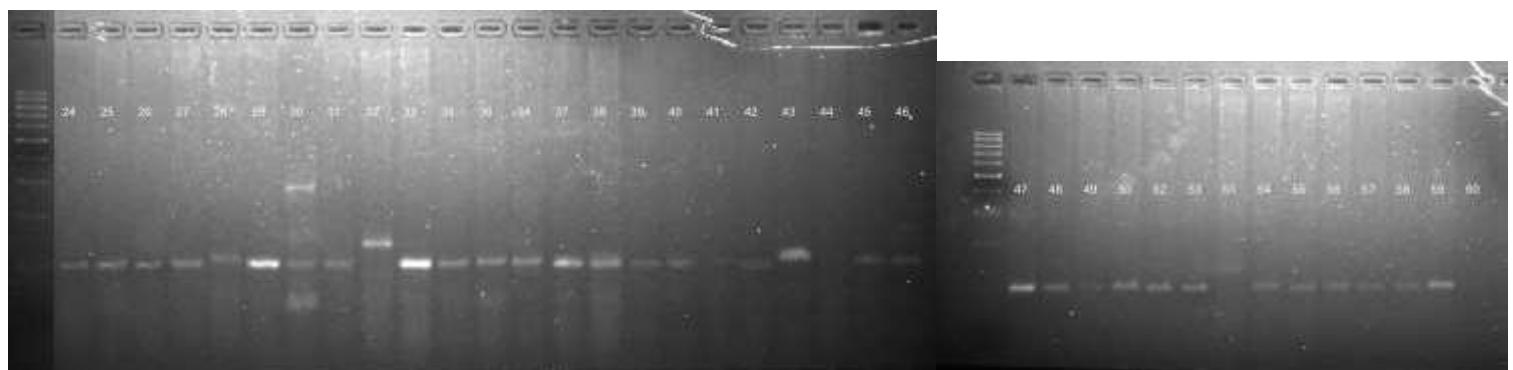
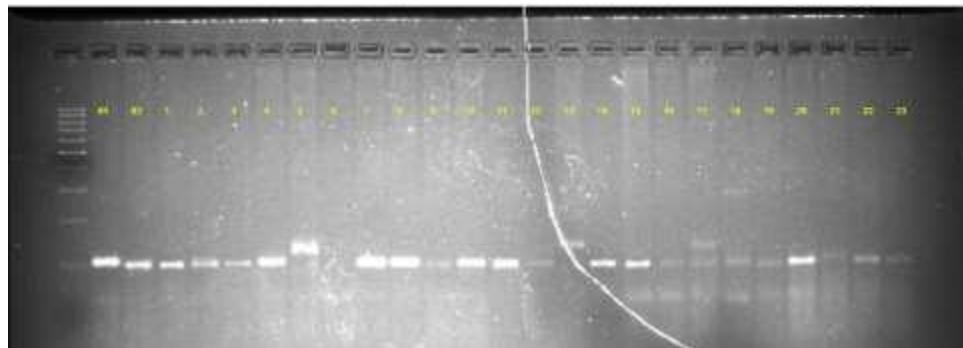
**26) RM110**



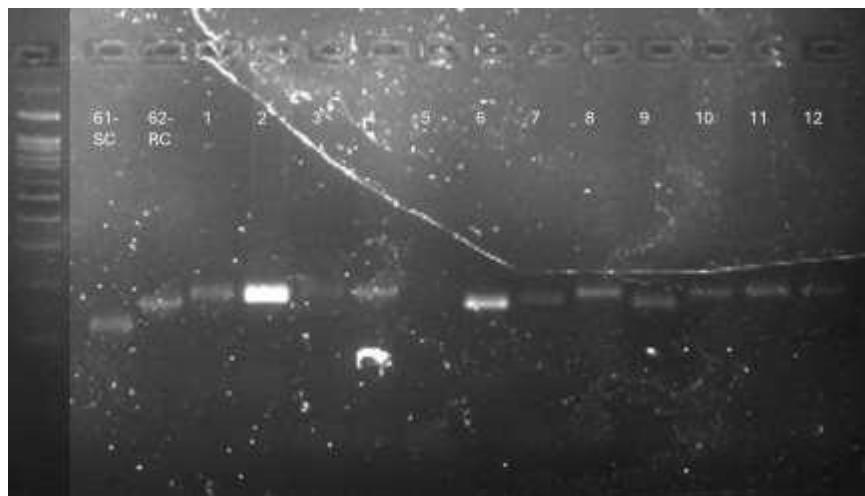
**27) RM432**

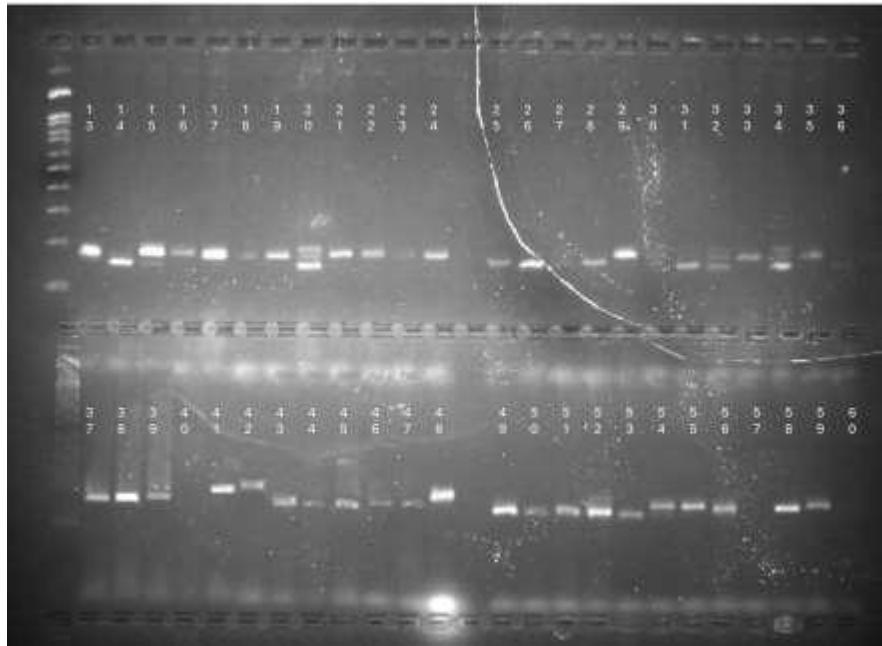


**28) RM25292**

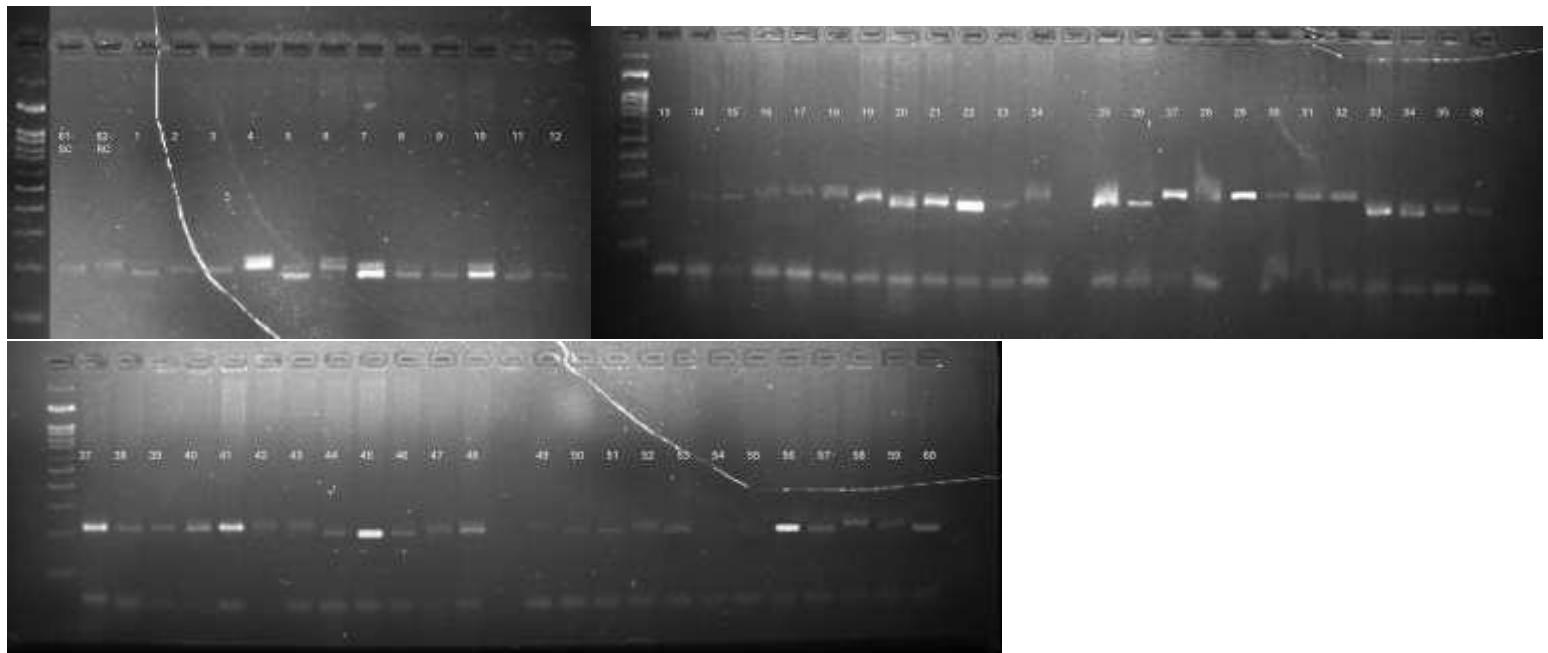


**29) RM202**

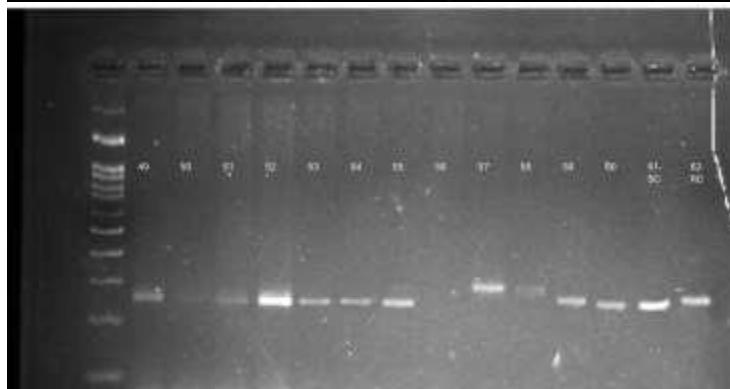
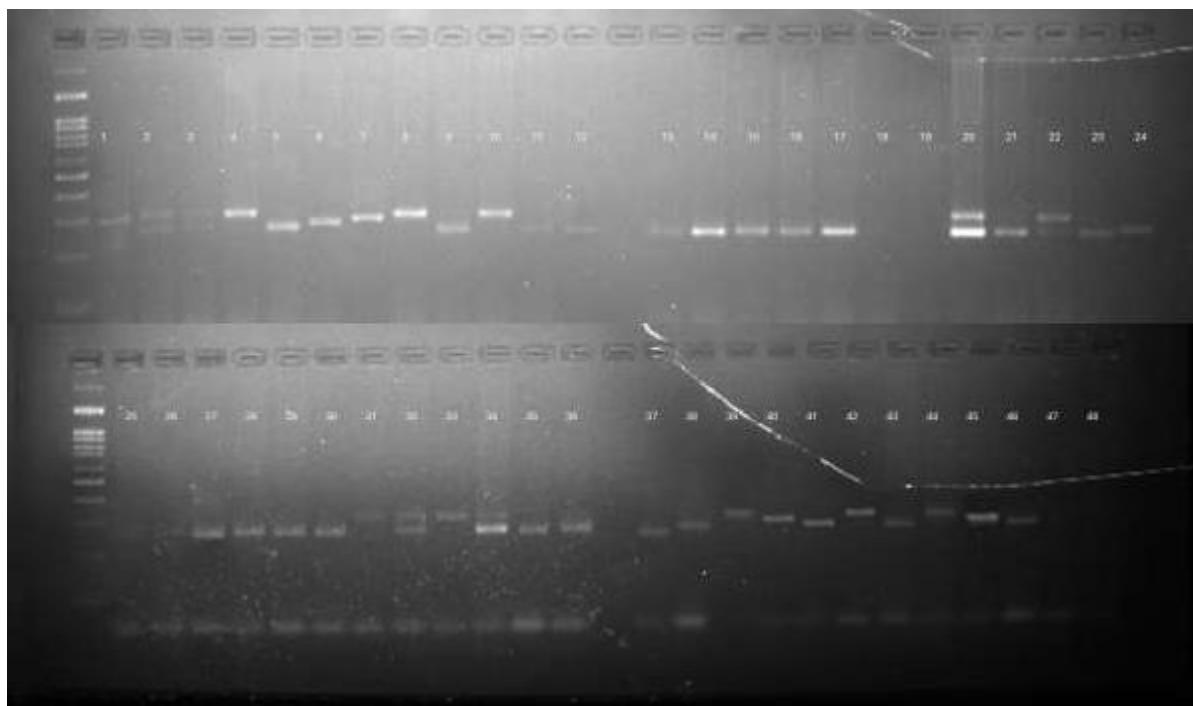




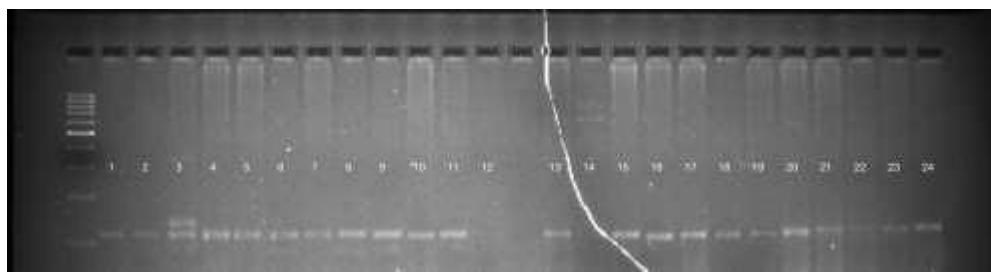
30)RM144



31)RM101



32)RM5341



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33)RM 190

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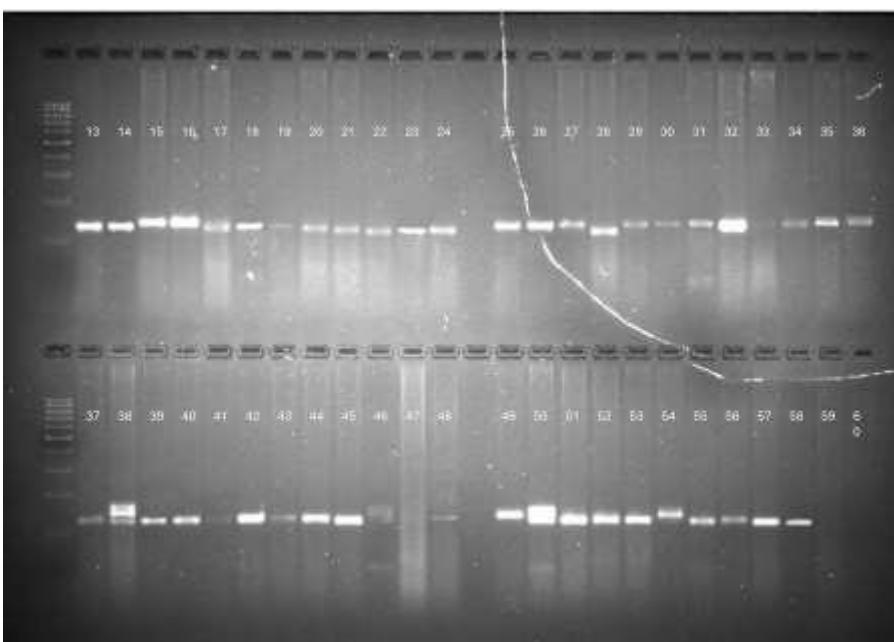
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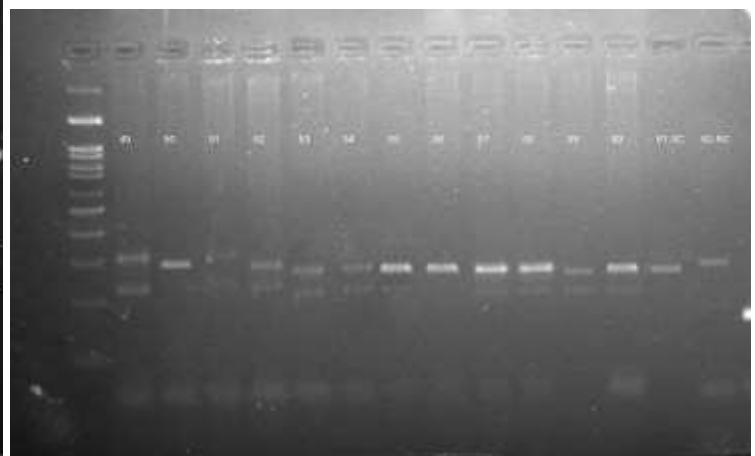
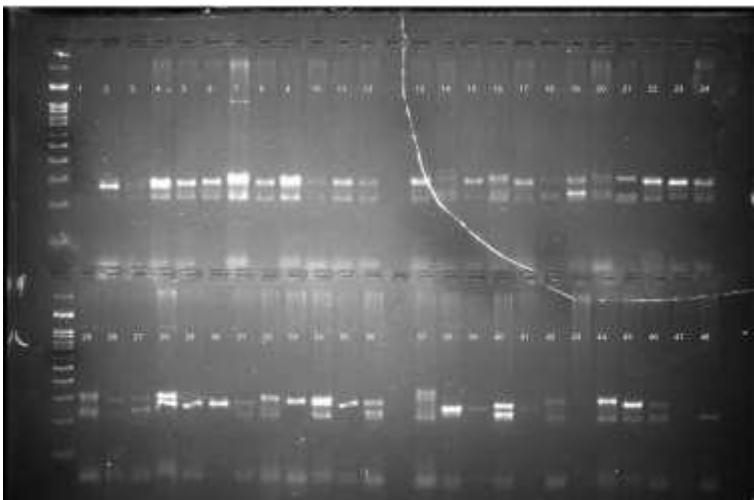
34)RM216

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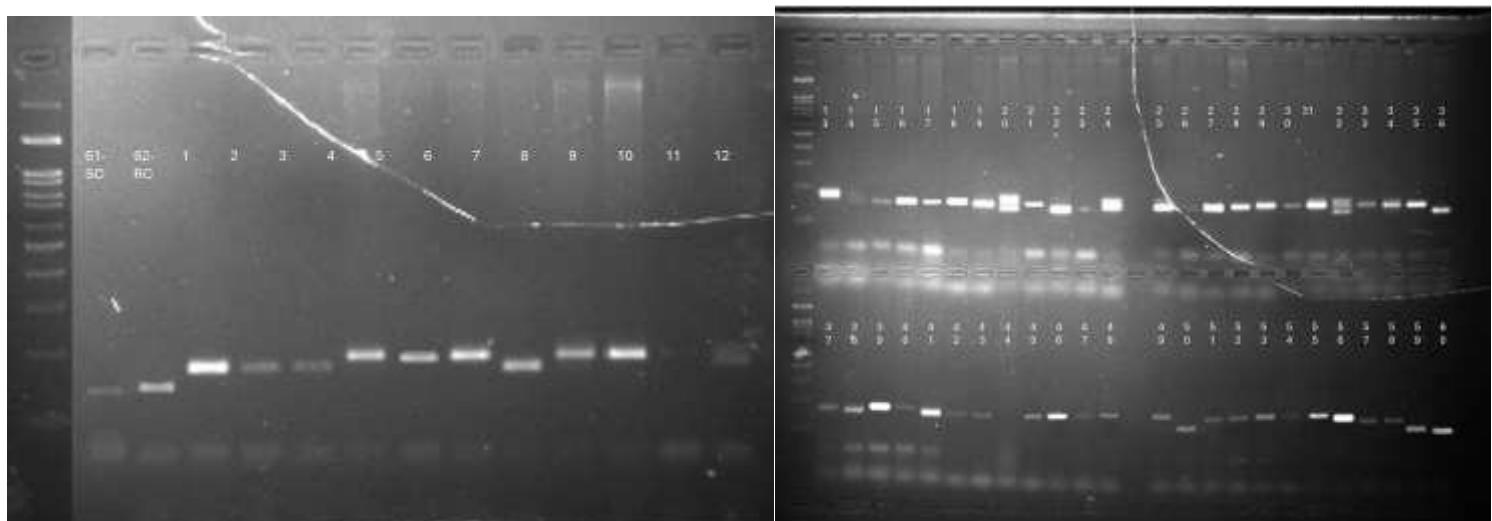
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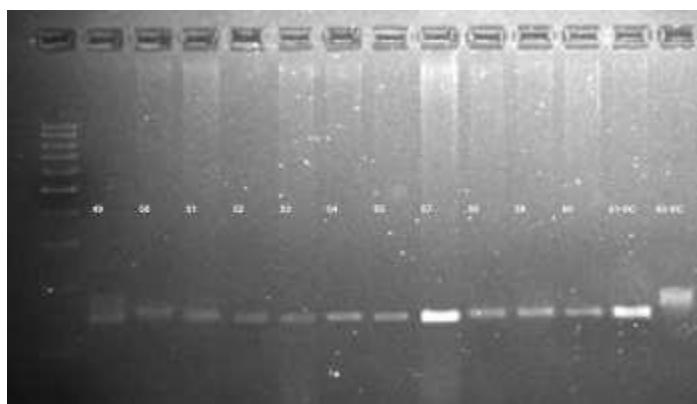
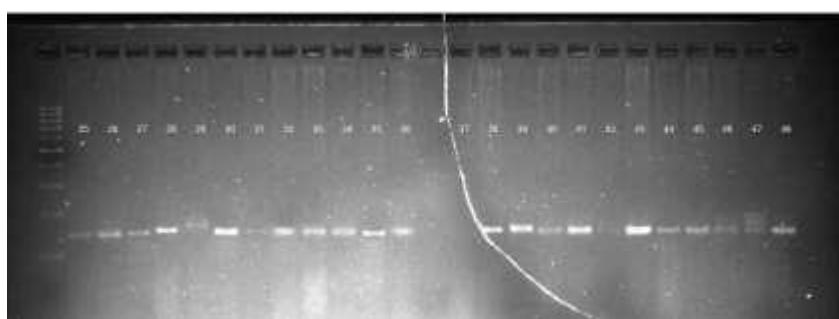
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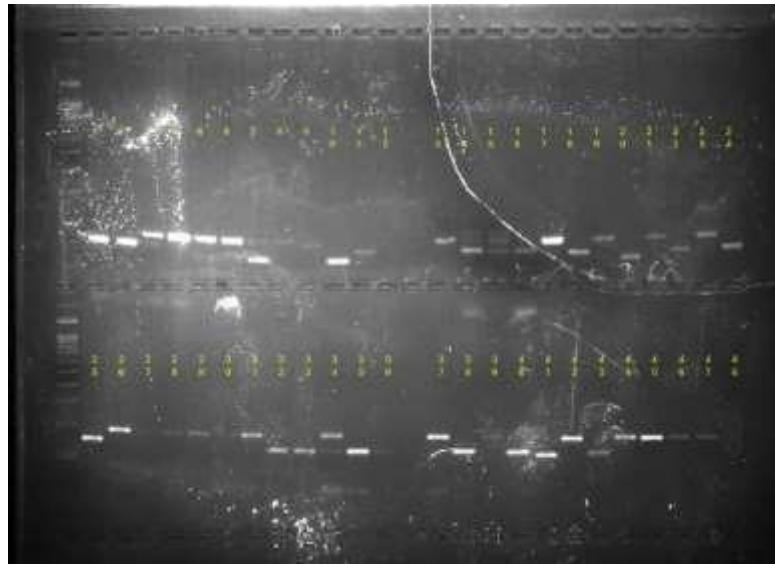
**36) RM5609**



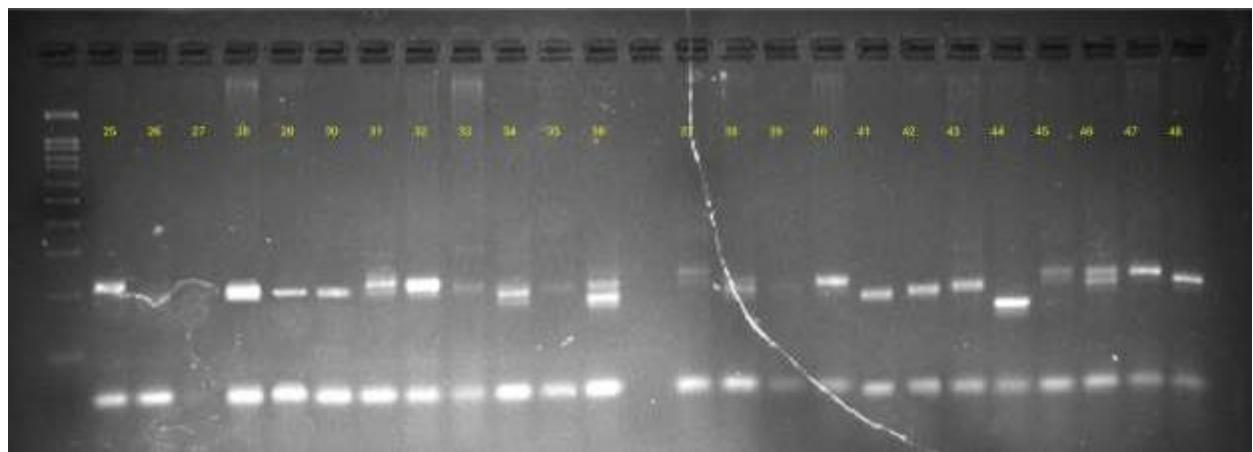
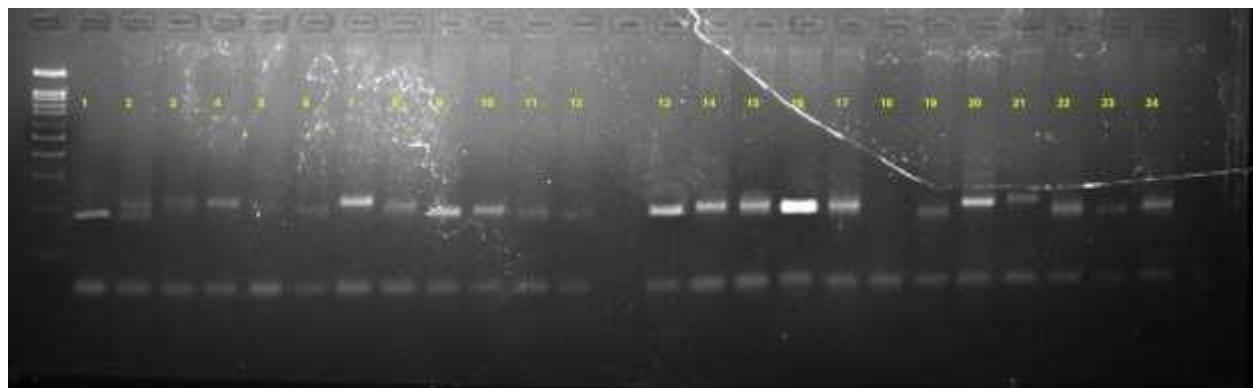
**37) RM211**

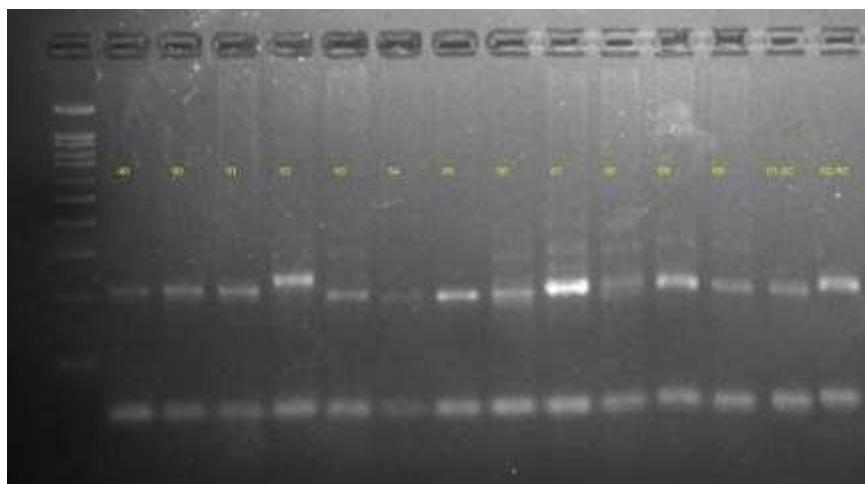


**38) RM6085**

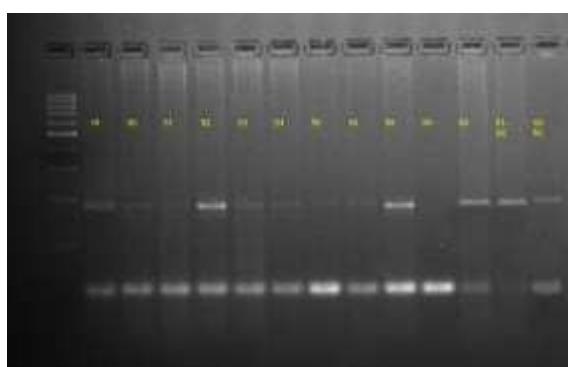
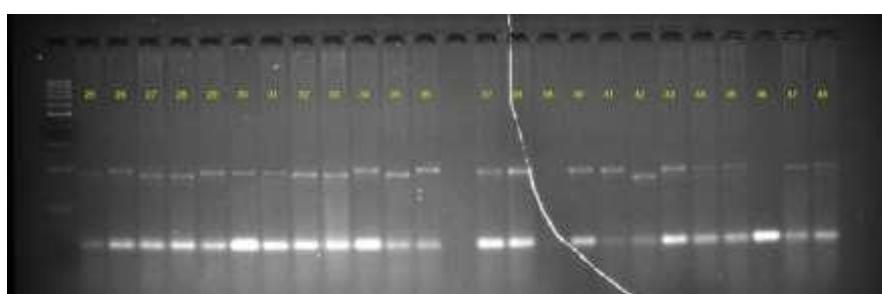
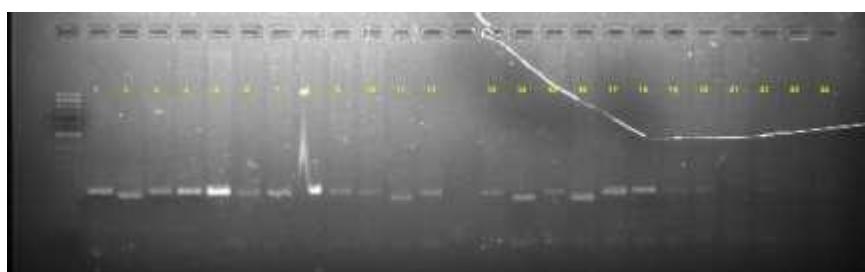


**39) RM6925**





40) RM18451



41) RM263

